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B8

TRAILBLAZER

RESOURCE CONSERVATION AND DEVELOPMENT PROJECT PLAN

- BIENVILLE
 - BOSSIER
 - CLAIBORNE
 - WEBSTER
- PARISHES
LOUISIANA



TRAILBLAZING IN RESOURCE DEVELOPMENT
FOR QUALITY LIVING

Prepared by
RC&D Project Committees & Assisting Agencies
in Cooperation with
USDA-Soil Conservation Service
Alexandria, Louisiana 71301

4-24126 REV. 3-70
USDA-SCS-FORT WORTH, TEX. 1970

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Claiborne Parish Police Jury
D'Arbonne Soil and Water Conservation District

Prepared Under
Authority of the Food and Agriculture Act of 1962
U. S. Congress (Public Law 87-703)
Assisted by
U. S. Department of Agriculture
Soil Conservation Service
Alexandria, Louisiana



November 4, 1969

LOUISIANA STATE UNIVERSITY

P. O. DRAWER CS

TELEPHONE 389-6548

BATON ROUGE, LOUISIANA 70803

CHAIRMAN
RICHARD S. THOMPSON
RT. 2, BOX 22
COLFAX

VICE-CHAIRMAN
DR. J. N. EFFERSON, DEAN
COLLEGE OF AGRICULTURE
LOUISIANA STATE UNIVERSITY
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CHARLEY S. STAPLES
EXECUTIVE DIRECTOR

Mr. R. D. Hinton, Chairman
Trailblazer 4 RC&D
Steering Committee
Post Office Box 670
Minden, Louisiana 71055

Dear Mr. Hinton:

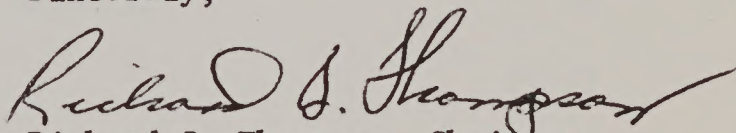
The State Soil and Water Conservation Committee reviewed the Trailblazer 4 Resource Conservation and Development Project plan at their regular monthly meeting October 28, 1969 in Shreveport, Louisiana. The efforts of local citizens and federal and state agencies in preparing the plan is commendable.

On behalf of the Governor of the State of Louisiana, this Committee wholeheartedly endorses this plan and offers its assistance in carrying out the project.

The many project measures proposed to further develop the resources of this project area offers a challenge to all concerned. This approach, no doubt, will bring about action by more people in resource development.

We congratulate you on this effort and pledge again our support.

Sincerely,


Richard S. Thompson, Chairman
State Soil & Water Conservation
Committee

RST:p

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INTRODUCTION

This plan is a revision of the Bossier and Webster Parishes Resource Conservation and Development Project plan. It resulted from the addition of Bienville and Claiborne to the original two parishes.

The project was renamed Trailblazer 4 which was prompted by the project area's "trailblazing" in resource conservation and development. In addition to being Louisiana's first RC&D project, the area has two other firsts of significant importance. It was here that the present-day soil and water conservation program in the State began. The area also is the site of the first multiple purpose reservoirs that included recreation in a PL-566 watershed project in the Nation. The numeral 4 denotes the four parishes - Bienville, Bossier, Claiborne, and Webster - which comprise the project area.

This plan is a product of the people of the four parishes and represents the efforts of hundreds of them. A number of local, State and Federal agency representatives served as advisors and provided inventories, maps, and charts needed for sound resource planning.

A steering committee composed of 20 citizens was named by the sponsors to direct the activities of the project and act in an official capacity for them. To study the needs of the area, screen proposals, and assist in implementing project measures, the sponsors formed in each parish ten-member standing committees in Agriculture, Forestry, Recreation and Tourism, Community and Industrial Needs, and Training and Education Needs.

Local people made known their desires for needed action by submitting proposed project measures to the standing committees. The most suitable were submitted to the steering committee. They in turn selected the ones which are included in this plan.

Resource planning is a continuing process, therefore, project measures can be added, changed, or deleted as needed. This plan is not binding upon either the project sponsors or cooperating public agencies. Detailed planning design and financial commitments are part of the operation stage.

This project is locally controlled and directed. Its success will depend not only on the resources that the Federal and State Governments can provide but also and even more importantly upon local people, local communities, and their voluntary private organizations.

SUMMARY

The Trailblazer 4 Resource Conservation and Development Project is located in the northwest portion of the State. The area comprises Bienville, Bossier, Claiborne, and Webster Parishes and has a total land area of 1,943,900 acres and 36,880 acres of water.

The primary objective of this plan, and ultimately the project, is to develop and use wisely the area's resources for economic growth and to provide for the needs of the people in and outside the project area.

The presence of a wealth of undeveloped soil, water, forest, wildlife and related resources is evidence of potential benefits in the area.

Many problems that the people and communities are facing offer opportunities for development. Problems such as rapidly changing land use, forests producing at less than one-half the potential rate, agricultural income far short of its potential, lack of adequate water management and water quality control, a rapidly expanding population in some areas and a declining one in others, lack of recreational facilities and many others confront these people and add to the complexity of developing resources to meet the needs of all people.

Local people have indicated a strong willingness to carry out many needed project measures to the limit of their financial and technical ability. They know, however, that additional technical and financial assistance will be needed to help do the job.

The following summarizes the contents of the five resource sections of this plan:

Agriculture

There are 171,800 acres of cropland and 169,800 acres of grassland in the project area. This land produces crops, beef, dairy, poultry, and swine products valued at more than \$11.8 million. With accelerated treatment of cropland and grassland, annual net returns are expected to increase by more than \$3 million. In addition, net returns from livestock can be considerably increased by the application of improved breeding, feeding, and management practices.

The cost of this accelerated land treatment during the 10-year period is about \$12.9 million.

Forest Resources

About 1.5 million acres of the project area are in woodland. This represents 77 per cent of the land area. About 78 per cent of this woodland is under private ownership, industry owns 16 per cent and 6 per cent is in public ownership.

To encourage continued expansion of forest industries of the area, there must be an improvement in the quantity and quality of timber now growing.

Forest lands in the hands of forest industries and public agencies are reasonably well managed. Wise utilization of the 1.2 million acres of woodlands now under farm and other private ownership which is producing wood at less than one-half the potential rate poses the more difficult task. It is from this ownership that the most significant improvement in quantity and quality of raw wood to supply the forest industry can be realized.

The adoption of an orderly, well-planned program of speeding up cultural treatment can bring a 35 per cent increase in timber growth during the next 15 years. Stepped up management practices adopted from latest research information by industrial and public forest land managers will account for an additional volume of timber over and above the 35 per cent increase anticipated from improved private woodland management practices.

If proposed efforts are initiated, the increase in timber growth by 1985 will have a value in excess of \$2 million. Further, this increase in timber growth will have extended benefits, such as increased output in pine plywood and other finished products. It is estimated that this extension will benefit the economy by \$40 million.

It is estimated that technical assistance and field operations over the 15-year period will cost \$1,757,000. Of this, \$376,000 would be needed from ACP cost-sharing funds for the application of cultural practices by private woodland owners, \$624,000 from RC&D funds, and \$156,000 from the Louisiana Forestry Commission in cooperation with U. S. Forest Service for technical assistance. The remaining cost \$601,000, would be borne by the woodland owners.

The success of efforts aimed at increasing timber growth will depend on the following:

- - Leadership capacity of the RC&D sponsors and committees to stimulate woodland owners to participate in the program.
- - Ability of consultants, forest industries, and government agencies to meet requirements for professional and technical assistance.

Recreation, Wildlife and Tourism

More proposals relating to outdoor recreation, hunting, fishing, and tourism have been submitted than for any other resource development.

It is recognized that if the recreational requirements are to be met, existing facilities must be improved and additional ones acquired. This area has a high potential for further development of most recreational enterprises.

To more fully develop this potential:

- - Twelve proposals were adopted to develop and improve facilities on the Bodcau and the Jackson-Bienville Game Management areas.

- - The recreation and wildlife management improvement plans for the Kisatchie National Forest lands and the Caney and Corney Lakes recreation areas were endorsed.
- - Project measures were approved that call for the improvement and development of recreational facilities on Bistineau, Claiborne, Mill Creek, Ivan and Kepler Lakes.
- - The improvement of two city parks and the development of five new ones were proposed. Two of these parks will be along lakes in the area. Another will be the reclamation of worked-out gravel pits into a public recreation area.
- - Other project measures proposed include: scenic gardens and drives; bicycle trails; boat trails along three bayous; picnic areas; boat launching ramps; three golf courses, archeological surveys and studies; town and highway beautification; rifle, pistol and archery ranges; field trial areas for hunting dogs; nature trails; restoration of historic sites, homes, and roads; stream pollution abatement; and other related items.

Community and Rural Development

This resource section points up the need for a more prosperous, more beautiful, and more fulfilling rural area. It is principally concerned with the objective of attracting industry to rural communities by making them more desirable places to live and work.

- - Water and sewerage systems are named as basic needs. Five communities have recently installed water systems. Thirteen additional water systems and five sewer systems are proposed. Three comprehensive parish-wide water and sewer plans are needed. Loans and grants are needed for planning and construction.
- - The area has great potentials in its mineral resources. A number of proposals call for the exploration and maximum development of these resources to assure that they contribute fully to strengthening the economy of the area.
- - Many project measures propose programs that will stabilize eroding and sediment producing areas, control flooding, eliminate pollution hazards, and alleviate other resource problems that have hampered community growth.
- - Installation of proposed project measures such as improved highways, more sanitary landfills, industrial parks, airports, civic centers, and better health facilities will attract new industries, new markets and new homebuilders.
- - It is recognized that economic growth depends upon the availability of trained workers. It is proposed that full use be made of education, training, and work programs in promoting meaningful employment.

Water Resources

This section presents information on surface and ground water in the project area. Included is an inventory of existing and potential water impoundment sites and proposed project measures designed to develop the area's water resources.

The quality of surface water varies from good to poor with oil field and industrial wastes contributing to pollution in some streams. Quality of surface water is variable with large amounts available during the winter and spring months. However, with the exception of a few streams, storage facilities will be required to provide continuous supplies of water.

Ground water is generally in moderate supplies and is of good quality.

Four Public Law 566 reservoirs have been installed with water storage allocated to flood prevention, fish and wildlife, and municipal and industrial purposes.

Two PL-566 multiple purpose reservoirs are in the design and construction stage.

Eight reservoirs have been installed by other federal and state agencies.

Some 129 potential reservoir sites are shown on the water resource map which can be developed to reduce flood hazards and provide a more stable supply of high quality water for agriculture, municipal, recreation, and industrial use. Also shown are seven potential scenic rivers and streams listed in the 1970-75 Louisiana Comprehensive Outdoor Recreation Plan.

Economic Impact

The total cost of installing the RC&D program is estimated at \$116 million. Installation is expected to be completed during the 15-year period, 1970-1985. Economic impacts from the RC&D program are expected to come from three sources: (1) installation expenditures, (2) annual operation and maintenance expenditures, and (3) returns on project associated investments once proposed developments are completed and all project measures are in operation.

If the total RC&D program is installed, it is estimated that program installation will increase the total income of the project area by \$140.4 million or \$9.36 million per year over the 15-year installation period, and will create 7,000 man-years of employment during installation. Once installed and in operation, the project measures are estimated to create 1,784 man-years of employment and increase the gross income of the area by \$29.3 million annually.

DESCRIPTION OF THE PROJECT AREA

Location and Size

The project is located in Northwest Louisiana and embraces all of Bienville, Bossier, Claiborne, and Webster Parishes. It contains about 1,943,900 acres of land and 36,880 acres of water.

Bossier City, with a population of about 50,000; Minden, 15,000; Springhill, 6,800; Homer, 5,000; Haynesville and Arcadia about 3,000 each are the largest cities.

Soils and Land Use

The project lies within the Southern Coastal Plain and the Southern Mississippi Valley Alluvium major land resource areas.

The soils of the Red River Valley in Bossier Parish are generally fertile and highly productive. They are nearly level to gently sloping and are used primarily for cultivated crops and pastures. The rolling hill lands of the Coastal Plain in Bienville, Claiborne, and Webster Parishes are low in natural fertility and many are moderately low to low in available moisture capacity. They are used primarily for woodland with some of the smoother, better soils used for pasture.

Located on the broad, nearly level to moderately sloping stream terraces west of Bayou Dorcheat in Webster Parish, west of Bodcau Bayou in Bossier Parish, and in the western part of Bienville Parish are large wooded areas on the poorly drained soils and many acres of improved pastures on the moderately well to well drained soils.

Most of the red gravelly soils in Bienville, Claiborne, and Webster Parishes that were cultivated are now in woodland, largely pine.

The coarse textured sandy soils in the southern part of Bienville Parish have largely returned to woodland. However, a small acreage is still used for growing watermelons.

Nearly all of the bottomlands along the major streams such as D'Arbonne, Bodcau, and Dorcheat Bayous and their tributaries are subject to overflow and are used largely for woodland, both pine and hardwoods.

Agricultural Trends

Before 1940, agriculture was based largely on cotton. With the exception of the productive alluvial soils of the Red River Valley in Bossier Parish this is no longer true. At present only a few hundred acres of cotton are being grown in the Coastal Plain area. Many acres of former row cropland have been converted to improved pastures for dairy and beef cattle. Both pulpwood and sawlogs are being harvested from many acres where cotton was once king. On the alluvial soils of the Red River in Bossier Parish agriculture is more stable. Here, cotton is still the

leading crop in both acreage and value. Mechanization and an increase in the amount of land used for the production of livestock, mostly beef cattle, have been the principal changes on these soils in recent years. All indications point to a large increase in soybean acreage on these soils in the near future.

Climate

The climate of the project area is influenced principally by its subtropical latitude and the proximity of the warm waters of the Gulf of Mexico. In summer the prevailing southerly winds provide a moist tropical climate, but occasionally the pressure distribution is such as to bring west or north winds and hot dry weather. In winter, the area is alternately subjected to moist tropical air and to dry cold air. Changes in temperature are sometimes rapid.

The mean annual rainfall is about 50 inches. Usually August, September, and October are the driest months and December, March, and April the wettest. January is the coldest month with an average temperature of 46 degrees. August is the hottest month with an average temperature of 83 degrees. The average frost-free growing season is 222 days a year extending from the last of March to the first of November.

Economic Conditions

The total population in the project area according to the census showed an increase of 11.2 per cent from 120,011 in 1950 to 133,456 in 1960. This increase was exceeded by that of the state of Louisiana and the United States with 21.4 and 18.5 per cent respectively. During the same period the out-migration totaled almost 14,000 for the area. Population density is approximately 44 people per square mile. The projected population for 1970 is 152,944 as estimated by the Division of Business and Economic Research, Louisiana State University in New Orleans.

In 1960 almost 51 per cent of the population was urban, seven per cent was rural farm and 42 per cent was rural non-farm. About 62 per cent of the population was under 35 years of age while eight per cent was 65 and over. The percentage of people 65 and over was one per cent higher than the state's percentage in this age group. Less than 35 per cent of those 25 years of age and older had a high school education or better. This is compared with 41 per cent nationally.

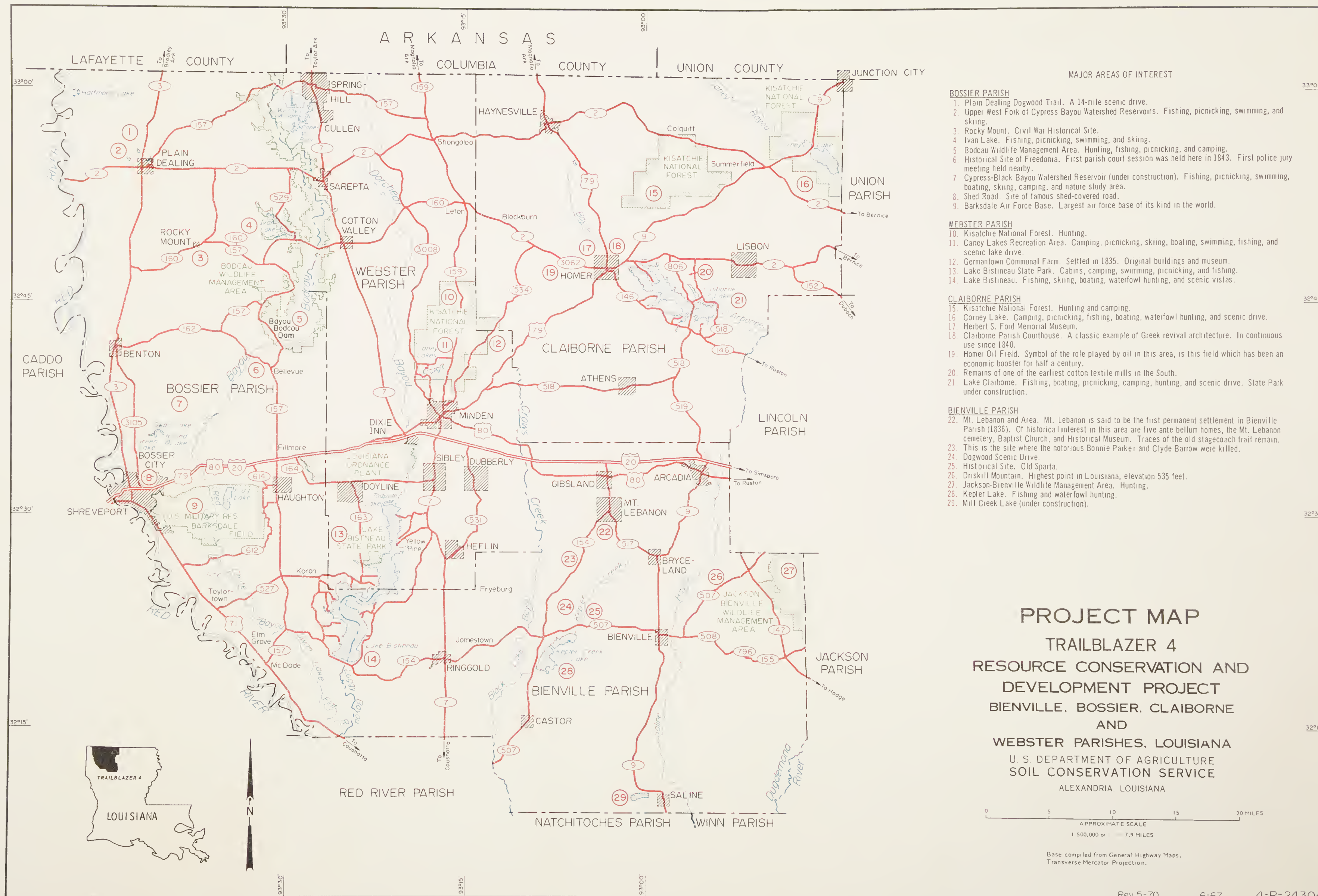
Total employment showed a drop of more than 20 per cent in Claiborne and Bienville Parishes from 1950 to 1960 while Bossier and Webster Parishes had an increase of 37 and 16 per cent respectively. For the project area total employment increased from 34,952 in 1950 to 37,069 in 1960 or 6.1 per cent. Between 1950 and 1960 agricultural employment declined 6,326 persons or 69 per cent. Agricultural employment was less than 8 per cent of total employment for 1960 whereas in 1950 it was over 26 per cent.

A breakdown of total employment in 1960 by major categories was as follows: Agriculture, 7.7 per cent; manufacturing, 19.1 per cent; wholesale and retail trade, 17.6 per cent; business and personal services, 21.9 per cent; construction, 9.3 per cent; associated industries, 24.4 per cent.

The median rural families income for 1960 was \$2,892 and for the farm families was \$2,442. Only 4.4 per cent of all families had income of over \$10,000 while about 62 per cent had incomes of less than \$4,000. Approximately 37 per cent of the families had annual income under \$2,000.

PROJECT OBJECTIVES

- - Accelerate the conservation and development of the area's cropland and grassland and improve livestock breeding, feeding, and management practices to increase the income of landowners and operators and associated service businesses.
- - Improve the quantity and quality of timber to meet the expanding needs of the forest industry.
- - More fully develop the recreational, wildlife, and tourism potentials.
- - Attract more industries to use local resource products and create more jobs.
- - Assist municipalities to improve facilities such as water and sewer systems, streets, parks, libraries, health and sanitation, education, and others which would make them more desirable places to live and work.
- - Expand educational and training opportunities and increase resource educational work with youth.
- - Protect, conserve, and develop natural, scenic, archeological, and historic resources.
- - Encourage and assist in activities contributing to the enhancement of natural beauty and improvement of the appearance of the area.
- - Make needed soil surveys for both rural and urban use.
- - Make full use of the local leadership and secure the participation and support of all the people.



- MAJOR AREAS OF INTEREST**
- BOSSIER PARISH**
1. Plain Dealing Dogwood Trail. A 14-mile scenic drive.
 2. Upper West Fork of Cypress Bayou Watershed Reservoirs. Fishing, picnicking, swimming, and skiing.
 3. Rocky Mount. Civil War Historical Site.
 4. Ivan Lake. Fishing, picnicking, swimming, and skiing.
 5. Bodcau Wildlife Management Area. Hunting, fishing, picnicking, and camping.
 6. Historical Site of Freedomia. First parish court session was held here in 1843. First police jury meeting held nearby.
 7. Cypress-Black Bayou Watershed Reservoir (under construction). Fishing, picnicking, swimming, boating, skiing, camping, and nature study area.
 8. Shed Road. Site of famous shed-covered road.
 9. Barksdale Air Force Base. Largest air force base of its kind in the world.
- WEBSTER PARISH**
10. Kisatchie National Forest. Hunting.
 11. Caney Lakes Recreation Area. Camping, picnicking, skiing, boating, swimming, fishing, and scenic lake drive.
 12. Germantown Communal Farm. Settled in 1835. Original buildings and museum.
 13. Lake Bistineau State Park. Cabins, camping, swimming, picnicking, and fishing.
 14. Lake Bistineau. Fishing, skiing, boating, waterfowl hunting, and scenic vistas.
- CLAIBORNE PARISH**
15. Kisatchie National Forest. Hunting and camping.
 16. Corney Lake. Camping, picnicking, fishing, boating, waterfowl hunting, and scenic drive.
 17. Herbert S. Ford Memorial Museum.
 18. Claiborne Parish Courthouse. A classic example of Greek revival architecture. In continuous use since 1840.
 19. Homer Oil Field. Symbol of the role played by oil in this area, is this field which has been an economic booster for half a century.
 20. Remains of one of the earliest cotton textile mills in the South.
 21. Lake Claiborne. Fishing, boating, picnicking, camping, hunting, and scenic drive. State Park under construction.
- BIENVILLE PARISH**
22. Mt. Lebanon and Area. Mt. Lebanon is said to be the first permanent settlement in Bienville Parish (1836). Of historical interest in this area are five ante bellum homes, the Mt. Lebanon cemetery, Baptist Church, and Historical Museum. Traces of the old stagecoach trail remain.
 23. This is the site where the notorious Bonnie Parker and Clyde Barrow were killed.
 24. Dogwood Scenic Drive.
 25. Historical Site. Old Sparta.
 26. Driskill Mountain. Highest point in Louisiana, elevation 535 feet.
 27. Jackson-Bienville Wildlife Management Area. Hunting.
 28. Kepler Lake. Fishing and waterfowl hunting.
 29. Mill Creek Lake (under construction).

PROJECT MAP
TRAILBLAZER 4
RESOURCE CONSERVATION AND
DEVELOPMENT PROJECT
BIENVILLE, BOSSIER, CLAIBORNE
AND
WEBSTER PARISHES, LOUISIANA
U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
ALEXANDRIA, LOUISIANA

0 5 10 15 20 MILES
APPROXIMATE SCALE
1:500,000 or 1:7.9 MILES
Base compiled from General Highway Maps.
Transverse Mercator Projection.

AGRICULTURE



Water, grass and trees not only produce food and fiber,
they, also, strengthen the economy of North Louisiana.

Crops and Cropland



Technical Assistance



Soil Surveys



Livestock and Grassland



Conservation Planning



Sediment Control



AGRICULTURE

General

The number of farms declined 52 per cent between 1954 and 1964 - from 7,533 to 3,596. Total acres of farmland declined 33 per cent. Average size of farms increased to 163 acres.

There are 10,160 operating units of rural lands that lend themselves to conservation planning and development.

The 1967 conservation needs inventory shows the following acres and per cent of cropland and pasture by parishes:

<u>Parish</u>	<u>Cropland (Acres)</u>	<u>Per Cent of Total Land Area</u>	<u>Pastures (Acres)</u>	<u>Per Cent of Total Land Area</u>
Bienville	37,700	7	23,500	4
Bossier	62,700	12	64,300	12
Claiborne	49,200	10	32,100	7
Webster	<u>22,100</u>	<u>6</u>	<u>49,900</u>	<u>13</u>
Project Total	171,700	9	169,800	9

Of the more than \$11.8 million of farm products sold in 1964, about \$4.5 million was for crops, \$2.3 million for dairy products, \$2.9 million for livestock and livestock products, and \$2.1 million for poultry and poultry products.

Problems

The major problem in agriculture is that agricultural income of landowners and operators and associated service businesses is far short of its potential.

Factors contributing to this problem include:

- - Low yields due to erosion and low fertility in the hill area.
- - Lack of adequate drainage, land leveling and land grading in the bottomlands.
- - Industrial and urban development encroachment on land best suited for agriculture.
- - A large acreage of unused or underused land suitable for agricultural uses.
- - Lack of capital and land resources have prevented many small landowner from adopting modern conservation farming methods and using modern equipment.
- - Farm labor shortage.

- - Lack of proper development, use, and maintenance of pastureland.
- - Poor quality breeding stock, poor livestock management, and low forage production.

Although the progress of conservation work is very substantial, much of the total improvement remains to be done. Cooperators of the Dorcheat, D'Arbonne, and Saline Soil and Water Conservation Districts now total 5,839 out of a potential 10,160. Presently 4,607 of the cooperators have conservation plans for their entire operating units. Indicative of progress and needs in land treatment are the following major conservation practices now on the land:

<u>Practice</u>	<u>Now on the Land</u>
Conservation Cropping System	20,400 acres
Contour Farming.	10,626 acres
Drainage Mains, Laterals and Field Ditches.	4,821,000 feet
Irrigation Systems.	5 systems
Land Grading and Leveling	250 acres
Pasture and Hayland Planting.	140,100 acres
Pasture and Hayland Management.	109,300 acres
Farm Ponds.	3,167 number
Tree Planting.	92,000 acres
Woodland Improved Harvesting.	106,700 acres
Woodland Weeding	48,000 acres
Wildlife Habitat Management.	54,600 acres

Opportunities

Excellent opportunities exist for correcting these problems and improving agricultural income. They include:

- - An accelerated program of conservation planning and land treatment based on soil surveys which will include proper combinations of practices.
- - Increased technical assistance to speed up the rate of conservation planning, practice application, and maintenance.
- - Production and marketing of truck and speciality crops on the 8,000 acres of cropland in the Cypress-Black Bayou Watershed in Bossier Parish where irrigation water will be made available.
- - Additional ACP cost-sharing and more extensive use of farm credit.
- - Proper seeding and fertilization of adapted grasses and legumes can more than double the forage production of pastures. Pastureland in the project area has a potential of supporting one brood cow and calf per acre. This, coupled with improved breeding, feeding and management practices, can increase the farm income substantially.

- - Considerable benefits can be obtained in supplementing improved pastures with proper grazing use of woodlands. The benefits would include fire hazard reduction, suppression of undesirable hardwoods and increased pasture production brought about by giving improved pastures periodic rests.
- - Net income from beef cattle can be increased by increasing the percentage of calf crop and marketing heavier calves.
- - The greatest opportunity for dairymen to make the most profit is in increasing production per cow. A 50 per cent increase in net income per cow is possible by the application of improved breeding, feeding, and management practices and development of high quality pastures properly managed.
- - An excellent market is available for feeder pigs. There is a possibility of locating a market hog buying station in the project area.

Opportunities for increasing income from woodlands, recreation, and wildlife uses are explored in other sections of this plan.

Project Measures

Acceleration of Soil Surveys

Bossier Parish has a published soil survey. In the remaining three parishes about 1,300,000 acres remain to be surveyed.

It is proposed that soil surveys be accelerated to accomodate the conservation planning and land treatment necessary to meet project objectives. This will require about 43 man years of soil scientist time at an estimated cost of \$516,000.

Accelerated Conservation Planning

To realize project objectives, it is proposed that conservation planning be accelerated so as to attain the following in the next 10 years:

- 2,690 new district cooperators
- 2,950 new conservation plans
- 2,423 revised conservation plans
- 26 resource plans

Accelerated Land Treatment

It is proposed that land treatment be accelerated during the next 10 years to accomplish the following amounts of major practices:

Conservation Cropping Systems.	50,000 acres
Critical Area Planting.	4,600 acres
Farm Ponds, number.	1,828
Fishpond Management, number	2,703
Drainage Land Grading	3,600 acres
Drainage Mains, Laterals and Field Ditches.	3,847,000 feet

Pasture and Hayland Planting (includes needed minerals) . .	88,000 acres
Pasture and Hayland Management (includes needed minerals).	107,000 acres
Proper Grazing Use	372,000 acres
Field Border Planting.	451,530 feet
Recreation Trail and Walkway	291,320 feet
Structures for Water Control, number	900
Irrigation Water Management	12,500 acres
Irrigation Land Leveling	4,400 acres
Wildlife Habitat Management.	251,500 acres

The estimated cost of installing these and other conservation practices during this 10-year period is about \$12,065,000.

This acceleration should result in the adequate treatment of about 57,000 acres of cropland and of about 107,000 acres of pasture and hayland. Estimated annual increase in net returns from cropland treated will be about \$1,425,000 or averaging about \$25 an acre. Increased annual net returns from treated pasture and haylands are estimated to total \$1,605,000 or an average of about \$15 an acre. In addition the increased use from woodland grazing is expected to be increased \$500,000 or about \$1.35 per acre.

It is further proposed to encourage and help landowners maximize net returns from their farmlands which could be considerably in excess of those above. This could be attained by a high degree of management and treatment with soil analysis as a basis for the use of minerals.

ACP Cost Sharing

To continue the present program and to achieve the above land treatment acceleration would require about \$418,700 annually of cost-sharing through the Agricultural Conservation Program. This is an increase of about \$173,500 annually over the present ACP allotment.

This does not include cost-sharing for forestry practices which are discussed in the Forestry Resource section.

Accelerated Technical Assistance

To accomplish the proposed conservation planning, land treatment, and other related services, it is proposed that the following additional technical assistance be requested from the Soil Conservation Service:

Four soil conservationists - one assigned fulltime to each parish.

One agronomist to devote equal time in Bossier and Webster Parishes.

Two conservation technicians - one each assigned fulltime to Claiborne and Bossier Parishes.

Two biologists to devote one-half time in each parish.

One landscape architect to devote one-fourth time in each parish.

Needed engineering and WAE assistance to handle project measures.

Additional assistance from the SCS state office staff and Watershed parties.

The Louisiana Cooperative Extension Service will be requested to provide two resource development agents to be partially financed by RC&D funds.

It is further proposed that RC&D funds be used to accomplish this acceleration at an estimated annual cost of \$216,000. In addition, PL-566 funds of \$116,000 will be provided over the ten-year period for land treatment allocation.

Proposed additional technical forestry assistance is included in the Forestry Section of this plan.

General Soils Maps

General soils maps with soil interpretations for agricultural and non-farm land uses have been prepared and published as RC&D project measures for Bossier, Webster, and Bienville Parishes.

It is proposed that a similar map be prepared and published for Claiborne Parish.

Weaned Calf Winter Grazing Program

Extensive research suggests that increased profits can be obtained from development of winter pasture and grazing weaned calves. Although the entire calf crop can utilize winter grazing, it is generally best suited to that portion of the calf crop that does not achieve suitable weaning weights.

This project measure proposes that the RC&D Agricultural Committees in cooperation with the Louisiana Cooperative Extension Service, Louisiana Agricultural Experiment Stations, Soil Conservation Service, Vocational Agriculture, Farmers Home Administration, Agricultural Stabilization and Conservation Service, lending agencies, and other businessmen provide assistance in implementing an educational program relating to benefits of properly managed winter grazing programs for weaned calves. In addition, 4-H and FFA members would be encouraged to participate since a winter grazing project for youth has been established.

Sediment Control

Sediment resulting from erosion of land is the greatest contributor to pollution of surface waters. The effect of this pollution by sediment is the impairment of the quality of the water and the damage caused where the sediment settles. The harmful effects are many.

The prevention and control of sediment may be accomplished by the control of its source - erosion. To accomplish the needed control, the following project measures are proposed:

- - Minimize soil erosion and curb sediment delivery from agricultural and forest lands.
- - Control sediment in stream channel systems.
- - Control sediment from erosion along parish roads and in connection with all highway and road construction programs.
- - Control sediment derived from erosion of abandoned gravel pit and road base material borrow areas.
- - Assist in effective erosion and sedimentation control in urban and industrial developments.

RC&D technical and financial assistance is needed for research on rehabilitation methods, for demonstrative areas, and for counseling and planning.

Town Ant Control (Bienville and Webster)

The Texas leaf-cutting ant, locally called town ant, is causing extensive damage to vegetation and trees in Bienville and Webster Parishes. Without adequate control measures town ant populations will spread over the entire project area.

This project measure proposes that project action be employed using Mirex bait with the bait available to landowners at cost.

All means of obtaining assistance to employ labor for the application of bait will be explored.

Gopher Control

Gophers are numerous and cause thousands of dollars in damage annually.

Gopher control activities could be speeded up by using gopher burrowing machines and poisoned maize. The machines and maize to be made available to landowners at cost.

Fire Ant Control

Three aerial applications of Mirex bait for the control of the imported fire ant have been made. The program was conducted jointly by the Louisiana Department of Agriculture and the USDA Agricultural Research Service.

The objective of this project measure is to eradicate the ant and keep the area free of them. All persons are urged to be on the lookout for fire ants and report their presence.

Increase Efficiency of Beef Production

This project measure sets an objective of helping cattlemen increase income by increased weaning weights, calving percentage, selling weights, and by keeping adequate records of their herds.

An intensive educational program will be provided to meet this objective.

Sponsor Pasture and Livestock Association (Webster)

This project measure proposes that the Webster Parish RC&D Agricultural Committee sponsor an association in the parish for the purpose of stimulating and promoting good pasture and livestock practices.

Pasture Demonstration (Webster)

A pilot pasture demonstration using 30-cow, 30-calf per 30-acre plots will be instituted in Webster Parish to provide needed information on the production and management of both pastures and livestock and provide a visual means of publicizing such information.

The Louisiana Cooperative Extension Service will be requested to take the leadership in developing the demonstrations.

Pasture Management Brochure

As a part of the education program of teaching and promoting the principles of forage production and utilization it is proposed that a brochure on pasture improvement be prepared and published.

Assistance for preparing it is needed from agronomists of the Potash Institute, Louisiana Cooperative Extension Service, Soil Conservation Service, and Louisiana Agriculture Experiment Stations. RC&D funds are needed for publishing it.

Grain Sorghum Trial Plantings

The quantity of feed grain produced in the project area has decreased while the use of feed grains has increased. The need for a satisfactory feed crop is great.

North Louisiana Hill Farm Experiment Station field experiments have shown that grain sorghum is well adapted to this area.

This project measure proposes that farmers be encouraged to plant five acres of grain sorghum on a trial basis according to the Experiment Station's recommendation for the purpose of analyzing the feasibility of growing the crop on the land available.

Irrigation Study (Bossier)

The Cypress-Black Bayou Watershed work plan provided for supplemental irrigation water for about 8,000 acres of bottomland between Benton and Bossier City.

It is proposed that a study be made of:

- - Supplemental irrigation needs.
- - Crops which can be most economically and profitably irrigated.

Food Industry Study (Bossier)

In preparation of the availability of irrigation water from the Cypress-Black Bayou Watershed reservoirs, it is proposed that a study be made of the feasibility of developing a truck crop industry, food processing plant and related businesses in the Bossier-Benton area.

Assistance will be requested from the Red River Economic Development District.

Hog Buying Station (Bossier and Webster)

This project measure calls for locating a hog buying station in Webster Parish.

A survey of the number of market hogs being fed out in this area indicates that the enterprise would be economically feasible.

Sponsored by the Northwest Louisiana Swine Producers Association and Louisiana Cooperative Extension Service.

Tick Eradication Study (Bossier)

Make a feasibility study of the eradication of ticks in Bossier Parish.

Pecan Tree Insect Eradication (Claiborne)

Make a feasibility study of eradication of pecan tree insects.

Farm Equipment Training School (Claiborne)

Through a farm equipment training school students learn to operate and repair farm equipment during a one-year training period under the Manpower Development and Training Act.

As a Bossier-Webster project measure, one class of 19 students has been held. This project measure proposes that the Claiborne Parish RC&D Agriculture Committee join the other parish committees in encouraging future schools and assisting in recruiting students.

Giant Step Program

This program is aimed at increasing farmer income by 50 per cent by 1972, strengthening family life, extending educational training in the 4-H program, assisting communities in resource development activities, and assuring that Extension Service programs are available to lower income farming groups.

This project measure calls for the endorsement of the program and assistance in implementing it.

FFA Soil Judging Contest

Encourage vocational agriculture teachers to enter FFA soil judging teams in the State FFA Soil Judging Contest.

Feeder Pig Sales

Encourage and assist the Northwest Louisiana Swine Growers Association with their feeder pig sales.

Seed and Turf Production

Develop community seed producing and processing operations and turf growing on a commercial basis.

Not included in this section of the plan are a number of Bossier-Webster project measures that have been completed.

Products from land support industry which supports people





Forest Resources



Tree Planting

Protection



Selective
Cutting

Weeding



Wood Products
Mean More Jobs



FOREST RESOURCES

General Situation

Size

Forest lands with a total of 1,492,400 acres represent 77 per cent of the project's total land area. This high percentage makes it imperative that forest resources be considered major factors in the economic well-being of the project area.

Land and Forest Acreage 1/

Parish	Total Land Acreage	Private Commercial Forest Acreage	Federal Commercial Forest Acreage	Per Cent Commercial Forest
Bienville	523,400	437,400	0	84
Bossier	545,600	360,700	43,000 <u>2/</u>	74
Claiborne	481,900	355,500	17,100	77
Webster	393,000	247,700	31,000 <u>3/</u>	71
Total	1,943,900	1,401,300	91,100	77

1/ According to 1967 Conservation Needs Inventory.

2/ 5,000 acres of open or built-up areas were deducted from the Barksdale field acreage.

3/ 1,100 acres of open or built-up areas were deducted from the acreage of Federal lands.

Acreage committed to forestry is increasing at about one per cent per year.

Ownership Pattern

By far the largest portion, 77 per cent of commercial forest lands still remain in the hands of farmers and other small private owners; industry owns 16 per cent; and 6 per cent is in public ownership.

There are 13,474 farm operators or private owners who hold title to 1,170,517 acres of timberland. Eighty-three per cent is made up of tracts of less than 500 acres in size. Industrial ownership accounts for 253,834 acres.

Soils

The soils fall into 20 woodland suitability groups. Each woodland suitability group consists of soils with similar productivity for growing certain woodcrops. The degree of erosion hazard, equipment restriction, and seedling mortality are also factors used to form these groups.

Private Commercial Forest Acreage by Site Classes
Within Woodland Suitability Groups

Potential Productivity	Bienville	Bossier	Claiborne	Webster	Total
Very High- Site Index 96+	28,100	9,600		500	38,200
High- Site Index 86-95	146,100	87,000	42,500	131,500	407,100
Moderately High- Site Index 76-85	251,400	170,500	310,000	110,400	842,300
Moderate- Site Index 66-75	11,800	91,400		5,300	108,500
Low- Site Index 66-		2,200	3,000		5,200
Total	437,400	360,700	355,500	247,700	1,401,300

Site index is the height that dominant trees will attain in 50 years. Loblolly pine, sweetgum, and water oak are used as indicator species for this area.

Basic data on soil and land use conditions is from quarter section samples mapped for 1967 Conservation Needs Inventory.

Soil types and ratings by site index are given on general soil maps for each parish.

Acreage by Forest Types

	<u>Bienville</u>	<u>Bossier</u>	<u>Claiborne</u>	<u>Webster</u>	<u>Total</u>
Pine	259,000	144,000	230,000	147,000	781,000
Pine-hardwood	<u>76,000</u>	<u>72,000</u>	<u>65,000</u>	<u>57,000</u>	<u>269,000</u>
Total	335,000	216,000	295,000	204,000	1,050,000
Oak-hickory	76,000	108,000	30,000	35,000	249,000
Oak, gum-cypress	<u>27,000</u>	<u>90,000</u>	<u>41,000</u>	<u>57,000</u>	<u>215,000</u>
Total	103,000	198,000	71,000	92,000	464,000
Grand Total	438,000	414,000	366,000	296,000	1,514,000

Measurements collected in 1964 and published in the 1965 Forest Survey of Louisiana show that the four parishes had an inventory of 9.1 million cords of softwood growing stock and 3.6 million cords of hardwood growing stock.

The same forest survey revealed that an average acre of woodland carried 1,764 board feet (Doyle Scale) of sawtimber and 2.3 cords of pulpwood. For the four parishes there are 2.7 billion board feet (Doyle Scale) of sawtimber, with 2.1 billion in softwood and 558.2 million board feet (Doyle Scale) in hardwood. By volume, 79 per cent of the sawtimber and 74 per cent of the growing stock is softwood.

During the past 2 decades millions of seedlings were planted to reforest open and abandoned fields. Figures assembled in 1968 indicate that there are now 92,302 acres of pine plantations.

Other Forest Resources

Multiple use of forest resources, water, wildlife, and recreation as well as wood is being practiced on federally-owned and several large industrial ownerships.

Forage, another forest resource, is available on thousands of acres of pine woodland.

Forest Protection

Forest fires and insect disease activities are potential problems for forest owners and must be considered along with other measures taken to make woodlands productive.

Fire control operations are responsible for an excellent fire record. The present system appears to be adequate, but the future must be watched carefully as improvement in the woodlands creates an increase in value of forest property. Increased values could justify more intensive protection, especially in areas of high risk and where hazards are created through timber harvesting and other woods operations.

Economic Data

Commercial Forest Products Enterprises

A Louisiana Forestry Commission report prepared in March 1969 listed 23 major forest industries in the four-parish project area. The combined annual production of 11 lumber and veneer mills reveals a capacity of 104.7 million board feet of pine and hardwood products.

Income from Forest Resources

The forest industry, including activities of harvesting, milling, manufacturing, selling and transporting, employs 13,000 workers who draw, either as salaries, wages or commissions, an estimated \$65 million annually. Timberland owners in 1965 realized almost \$3 million from sale of standing timber. This timber, converted by manufacturing, added \$60 million to the economy of the four-parish area.

Problems and Needs

Small Woodland Owners

The major problem is that the 13,000 small woodland owners, who own 78 per cent of the total forest acreage in the project area, are producing wood at less than one-half the potential rate.

It is from these small tracts that most of the raw wood will have to come to meet the increased demands of the timber industry.

These small woodland owners need to be contacted and sold on growing forest crops. They also need encouragement to participate in cost-sharing improvement programs and be provided technical assistance in carrying out practices. Many will need multiple use management plans.

Growth and Drain

According to the 1965 Louisiana Forest Survey, the total annual growth of all timber exceeded total drain.

Softwood exceeded cut by 124 per cent. Although this surplus growth provides a comfortable margin for maintaining a forest industrial base, an expansion in the pine plywood industry has substantially narrowed the margin.

The hardwood situation is already out of balance. Cut of hardwoods exceeded growth by 66 per cent.

Steps need to be taken to bring about a more favorable balance in the timber supply for supporting an expanding forest industry.

Forest Protection

The town ant and pocket gopher are inflicting varying degrees of damage, especially to young pine plantations. Individual action toward eliminating them has not been successful. Project action is needed to solve this problem.

Low Income Owners

Throughout the project area a majority of low income families are land-owners, many of them with woodlots in need of better protection and management. These people have neither the knowledge nor the funds required to get their woodlands in shape to add to their income. Technical and financial assistance is imperative if these woodlands are to benefit both their owners and the communities.

Occupational Training

Efficient and fullscale harvesting of the raw material is important enough to direct full attention upon equipment and methods to be used in meeting market demands. Labor, skilled and semi-skilled, is the key to efficient and full scale harvesting.

Industrial expansion must be supported by an increase in adequately trained workers. Training of native manpower is a solution and for this reason, full support must be given to the State's vocational training program. A survey of labor requirements would be most helpful to the Louisiana Department of Education in setting up training programs.

Cultural Needs

Cultural treatment is needed on 66 per cent of the forest acreage under private ownership in order to bring them into satisfactory production. These needs include:

Parish	None Required (Ac.)	Release (TSI) (Ac.)	Regeneration (Ac.)
Bienville	120,900	240,900	75,600
Bossier	144,300	182,500	87,200
Claiborne	135,100	153,700	77,000
Webster	113,500	113,400	68,900
Total	513,800	690,500	308,700

Utilization

Closer utilization of timber now being cut is needed to increase net production. Providing technical utilization and marketing assistance will guide timberland owners in this direction.

Mined Areas

More than 9,000 acres of worked-out gravel pits and road base material borrow areas need reshaping and planting or reseeding.

Access Roads

More and better access roads are needed to provide better timber hauling conditions and for forest fire control needs.

Forestry Loans

Low-interest, long-term forestry loans with deferred payment provisions are needed.

Multiple Use

Multiple use of forest lands means coordinating the resources of the forest - its wood, its water, its wildlife, its forage, and its recreation - to get the combination that provides the greatest service to the owner and to the people.

The greatest need is for recognition by private owners of the possibilities of developing these types of usage for income and for the community needs.

Opportunities

Cultural Practices

An improvement in the supply of pine timber, as well as hardwoods, will come through cultural treatment.

Timber stands now properly stocked, representing 46 per cent of the total forest acreage, can be brought up to maximum production through forestry practices such as removal of defective, cull, and undesirable trees.

The 309,000 acres of forest land presently understocked, 20 per cent of the total, when planted or reseeded and properly protected and managed will help provide the raw wood for the project's forest industry in the future.

Pine plantations totaling about 92,000 acres can be expected to make a similar contribution to the timber supply as they reach various merchantable ages if properly protected and managed.

Hardwood

Favorable market conditions for hardwood present an opportunity for emphasizing that careful study and consideration be given to the production of high quality hardwood sawlogs on approved sites.

Multiple Use

Economic conditions today dictate full management of all forest resources; wood, water, wildlife, recreation, and forage.

An opportunity exists to consider all these resources and attempt to balance these factors in order to meet the woodland owner's objectives. The application of multiple use management is generally the best approach to protection and utilization of forest resources, both for the owner's welfare and for the community needs.

Economic

Growth and expansion will depend, to a large measure, upon providing jobs and better income for the rural non-farmer group. Improved utilization of forest resources will provide some of the opportunities to achieve these goals. The opportunities are apparent from forest survey information.

It is estimated that raw wood production can be increased by 35 per cent during the next 15 years if vigorous measures are applied to management of the project area's timberlands.

Project Measures

Accelerated Forestry Practices

Future growth of forest industries in Northwest Louisiana hinges, to a great extent, on the productivity of the land now growing timber or open land that should be growing trees.

To accomplish the objectives in the development and treatment of woodlands the following major planning and treatment measures are proposed over a 15-year period:

	<u>Private (Ac)</u> <u>(Non Industrial)</u>	<u>Industrial</u> <u>(Ac)</u>	<u>Public</u> <u>(Ac)</u>	<u>Total</u>
Release (TSI)	8,000	8,000	4,000	20,000
Planting & Seeding	15,000	60,000	1,600	76,600
Prescribe Burning	225,000	300,000	45,000	570,000
Improved Harvesting	200,000	90,000	100,000	390,000
Management Pre- scriptions and Marketing and Utilization Plans	6,000 (owners)			6,000

The estimated cost of planning and installing these practices on the private (non-industrial) forests during this 15-year period is about \$1.75 million of which \$376,000 is ACP cost-sharing funds.

This acceleration of forestry practices should result in an extra stumpage growth worth about \$2 million and other side benefits that do not lend themselves to financial measurements. As raw wood is fed into the manufacturing and marketing channels, each dollar's worth of stumpage generates \$20 in expenditures related to salaries, wages, supplies, and equipment. Specifically, the \$2 million worth of stumpage would help turn over \$40 million within the project area economy.

Federally Owned Woodlands

Federal Land Areas

Forest Acreage

Kisatchie National Forest (Caney Ranger District)	31,151
Bayou Bodcau Dam and Reservoir.	26,718
Barksdale Air Force Base.	17,642
Louisiana Army Ammunition Plant	11,691
Total.	87,202

These federally-owned woodlands are well managed and make substantial contribution toward meeting the demands for timber products as well as for wildlife habitat and outdoor recreation.

It is proposed that further development and treatment of these woodlands continue in order to increase production and help relieve the growing pressures on private forests.

Accelerated Technical Assistance

Directing the major portion of public forestry assistance toward private woodlands will take care of 78 per cent of the total forest acreage in the project area. The remaining 22 per cent of forest lands are in industrial holdings or under Federal ownership and are already under acceptable standards of management.

Consulting and industrial foresters as well as State and Federal agency foresters are available for services to landowners. However, as RC&D leadership stimulates the interest of private woodland owners in good woodland management practices, additional technical assistance must be available for on-site help.

It is proposed that one full-time forester for each parish and a total of two forest management technicians be employed for the four parishes. This technical assistance to be furnished by the Louisiana Forestry Commission in cooperation with the U. S. Forest Service.

It is also proposed that RC&D funds be used to accomplish this acceleration at an estimated cost of \$624,000 along with State funds at an estimated cost of \$156,000.

Publicity Program

Conduct a strong publicity program directed toward small private woodland owners, telling them of the forest program and its services. This will include a forest management educational letter which will be sent to every landowner with 80 acres or more of timberland.

Access Roads

Develop plans for improving and increasing the network of access roads for each parish in order to provide better timber hauling conditions, for fire control needs and public use.

Forestry Loans

Use of low-interest, long-term forestry loans with deferred payment provision will encourage many private woodland owners to put their timber under management. A majority of the woodland owners can be classed as small landowners who are usually without much money to pay for forestry services. There are 13,000 separate timber tracts under 500 acres within the project area providing a fruitful area in which to promote sound woodland management practices. Forestry loans can provide the incentive to move forestry projects along toward the project goals.

It is proposed that the promotion of forestry loans be an element of the forestry program.

Woodland Site Preparation

Work closely with the State and parish ASC committees for the approval of woodland site preparation for ACP cost-sharing.

Mined Areas (Webster, Claiborne, Bienville)

An estimated 9,000 acres is presently in worked-out gravel and sand pits. Because of the rough condition that exists after the materials have been dug it is difficult and costly to transform such areas to ones of further usefulness. If restored by trees in its present condition, harvesting is difficult.

It is proposed that a contract be developed for the landowner specifying a method of handling spoil material so as to leave the mined areas in a useable condition.

Road Base Borrow Areas (Webster)

The excavation of iron ore type of native gravel used for road base material has created a serious erosion and sediment problem in the vicinity of the Shongaloo fire tower in Webster Parish. Because of the dense subsoil and gullied condition of the area, tree planting is difficult and costly. Consequently little planting is being done.

It is proposed that RC&D financial assistance be provided to partly offset the high planting costs and provide an incentive for restoring and protecting these areas.

Christmas Tree Growing (Claiborne, Bienville)

Christmas tree growing within the project area has possibilities although limited plantings have been unsuccessful. Additional species, variety, and cultural research should precede any large-scale plantings.

It is proposed that local research projects and demonstration areas be established for Christmas tree growing through the cooperative effort of the Louisiana Forestry Commission, L.S.U., and U.S. Forest Service to test species, spacing, and cultural treatments.

Species Suitability Study

A greater knowledge of local hardwood species is needed in such areas as suitability for specific sites, stand composition, tree improvement, and growth rates.

It is proposed that the Project request specific studies from the Southern Forest Experiment Station, L.S.U., and others with demonstration areas located within the area.

Vocational Training Program

Give full support to the State's vocational training program. Conduct a survey of labor requirements for use by the Louisiana Department of Education in setting up training programs.

Forest Landowners Training Courses

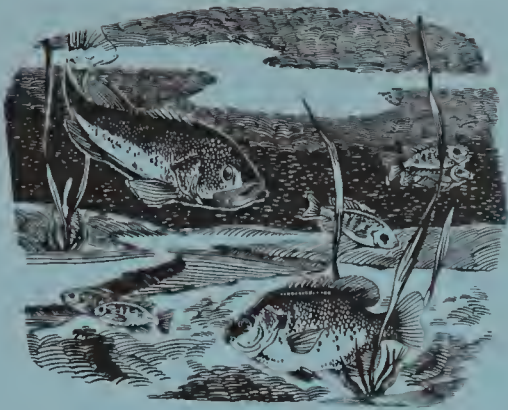
Assist the Louisiana Cooperative Extension Service in conducting a Forest Landowners Training Course in each parish.

Woodland Demonstration Plots

Assist in securing woodland plots for FFA chapters and 4-H clubs for woodland management training.

Forestry Occupational Training School (Bossier, Webster)

Build a new Forestry Occupational Training School within the project area qualifying graduates for all phases of subprofessional forestry employment.



Recreation, Wildlife, and Tourism



WILDLIFE

Fishing



RECREATION

Camping



Hunting



Swimming



TOURISM



RECREATION, WILDLIFE AND TOURISM

Situation

The people of Bienville, Bossier, Claiborne, and Webster Parishes have an excellent opportunity to improve the area's economy and make it a better place in which to live by increasing and improving recreational facilities and wildlife habitat and providing higher quality water for fish. A high potential for further development of all three exists.

All predictions point to a greater disposable income and leisure time for the people. This suggests the need of developing our natural resources for recreational uses to accomodate the increasing number of people who will have more time and money at their disposal, and who will be wanting to get away from the metropolitan areas for healthful out-of-door recreation.

Virtually all the land in the project area can support some kind of wildlife. Most of the cropland that is farmed intensively is considered low quality wildlife habitat. However, doves and some quail feed in fields where small grain crops are grown. In fields that are fallow, many seeds from native plants will attract doves and quail.

The Red River Valley produces very few forest-dwelling wildlife species, but has good to poor populations of small game. Quail and rabbit are found in moderate numbers depending on the fallow and brush land that exists. Doves are usually abundant during fall and winter months. A few patches of trees and swampland produce crops of squirrel and are attractive to ducks.

The forest areas of these parishes vary in their ability to produce game, particularly deer, squirrel, rabbit, and quail. Turkeys are currently being restocked by the Louisiana Wild Life and Fisheries Commission. In the upland areas which still retain their hardwoods, moderate to good populations of deer, squirrel, and rabbit can be expected. If such areas have been converted to pure pine stands, a few deer, quail, and rabbit will be present. However, their populations will generally be low. Short rotations where large blocks of timber are cut, provide excellent quail, rabbit, and deer habitat for about five years.

The bottomland hardwood areas are excellent habitat for deer, squirrel, and rabbits. Areas with pine in the upland that is on a short rotation and intersected with bottomlands provide very good to fair habitat for all the species mentioned.

Fish found in the area include species as Black, Yellow, and Striped Bass; Bluegill, Redear, Warmouth; White Pearch (crappie); and catfish. The larger bodies of water which provide fishing are Lakes Bistineau, Caney, Corney, Ivan, Murray, Bossier City Reservoir, Kepler, Claiborne, Dorcheat and Bodcau Bayous, and Black Lake. In addition to these, more than 3,167 farm ponds provide moderate to good fishing.

The Louisiana Wild Life and Fisheries Commission has three wildlife management areas. One is 32,472-acre Bodcau Wildlife Management Area. The second is the Jackson-Bienville Wildlife Management Area that covers 9,900 acres in Bienville Parish. The third is the Caney District of the Kisatchie National Forest and covers 31,155 acres. This district is broken down into three sections: Caney, Corney, and Middlefork. Camping, fishing, hiking, picnicking, swimming, and water skiing are also afforded by this National Forest.

There are several golf courses around Bossier City, Arcadia, Minden, Homer, Springhill, and Benton. They accomodate only a small number of the area's population. There are few shooting ranges, archery ranges, and horseback riding clubs.

Scenic beauty and tourist attraction areas are few in number. The Dogwood Drive near Plain Dealing presents a beautiful sight when the dogwood trees are in bloom. Much of the forest land makes good scenic drives during most seasons of the year, especially in the fall. Several of the larger lakes also provide some excellent vistas.

Problems, Needs and Opportunities

Financial and technical assistance to improve hunting, fishing, and other recreational opportunities are two of the greatest needs. With this assistance private ownership could develop income-producing recreation enterprises. Assistance is also needed to develop and improve facilities on public lands.

Most recreational facilities in the area need improvement. Others need development and/or proper management to make them provide the needed recreational experience. Camping, picnicking, golfing, and swimming facilities are limited. Hunting is good to moderate. Fishing is considered moderate due to low populations of desirable species.

Outdoor Recreation

Picnicking, water sports, golfing, horseback riding, and other outdoor sports could be expanded on state and federal as well as private lands. There is ample room around large bodies of water and along bayous for this type of development.

Fishing

Fishing, a powerful attractant for local as well as visiting sportsmen, can be improved by management measures such as fertilizer, control of aquatic weeds and removal of undesirable fish. Fish-out ponds, with a high stocking rate of channel catfish offer local pond owners a source of additional income.

Pollution

Pollution is probably the greatest hazard to fish production in flowing streams and bayous. Some of these polluted streams and bayous run into

large lakes and reduce fish yields there. Also, pollution has made some water bodies unfit for swimming and unattractive for other water sports.

Access Roads

Access to many bodies of water is poor. This inhibits their utilization by fishermen. More roads are needed to provide fishermen and hunters access to water bodies in the area.

Hunting

Hunting for most game in the area is fair, but can be improved. Control of poaching and free running dogs will increase the deer population. Squirrel populations are dependent on seed crops of oaks, hickories, and other mast-bearing trees. Saving some of these trees when improving pine stands and leaving creek bottom hardwoods will greatly improve squirrel populations.

Upland small game such as quail, dove, and rabbit need food and cover if they are to prosper. Food plantings and protecting areas of natural cover will increase upland game numbers. The many utility rights-of-way crossing these parishes offer an excellent place for wildlife food plantings and other types of wildlife management.

Waterfowl need a combination of food and water to assure their presence. Ducks are scarce in this area but could be increased by management. Fields planted to browntop millet or shallowly-flooded oak flats will lead to a higher duck population.

Recreation and Tourism Development

Many needs exist in the area for development of recreation and tourism projects. Most can be carried out on private land. Forms of recreational development and tourism attraction needs are: renovation of historical sites and homes; establishing floral gardens, fishing lakes and fish-out ponds; swimming beaches; picnic and camping areas. Other developments could include horseback riding, nature trails and hiking areas, shooting preserves, duck fields or greentree reservoirs.

State, local or Federal governments can participate in such projects as clearing boat trails along bayous; snags removed from lakes; fish management and weed control programs on large lakes; providing boat launching sites; archeological studies, surveys, and salvage; improving game habitat on state and federally-owned land; providing more refuse dumps and cleanup programs along rural roads; beautification of roads; renovating abandoned gravel pits; constructing shooting ranges, and many others.

Project Measures

These proposals relate to enterprises on Federal, State, and private lands. Federal and State agencies can assist local sponsors in developing many of them. Others are do-it-yourself measures.

Lake Bistineau (Bienville, Bossier, and Webster)

Lake Bistineau is an impoundment covering 17,200 acres. Fishing varies from fair to good but fails to attract large numbers of non-resident fishermen. Duck hunting currently is very poor. Water skiing, boating, and swimming attract limited numbers of participants. The lack of good beaches, boat launching sites, and cleared areas are detractants to these sports. An added problem is the presence of vast areas of heavy aquatic vegetation.

The Louisiana Wild Life and Fisheries Commission should enlarge their development and management program for the lake to include the following project measures:

- - Employ personnel for maintenance, enforcement of regulations, and management.
- - Acquire annual funds for development and management.
- - Make a survey to establish the state property line. There is confusion as to where and what is state property.
- - Construct a boat launching site on the west side of the lake. One was built on the east side as a Bossier-Webster project measure.
- - Carry out an annual water level fluctuation program for at least five years.
- - Explore all means of controlling aquatic vegetation.
- - Fence an area of the State Park and stock with fallow deer as an attraction for visitors. As these deer become over-abundant, they could be thinned by controlled bow hunting.
- - Develop several existing islands in the lake for recreational uses such as camping, picnicking, and spectator sports - watching boat races, water skiing events, etc.
- - Include public facilities for swimming and picnicking at the two boat landing ramps that are planned by the Louisiana Wild Life and Fisheries Commission.
- - Clear stumps and snags from Clarks Bayou in the vicinity of State Highway 163 and plant flowering shrubs and flowers along roadsides to improve the beauty of the area.
- - Investigate the possibility of constructing one or two greentree reservoirs on Clarks Bayou and area below the dam and develop if feasible.
- - Make a study of the needs of access roads and construct or repair as needed.

- - Impound a series of sloughs in the northeast section of the lake for a feeding and roosting area for ducks. Fluctuate the water, and plant duck foods in the summer and flood in the fall. Cut boat trails through this area and construct a road from State Highway 164 to provide better access for hunters.
- - Advertise the lake to attract more tourists. Make an accurate and up-to-date map of the lake and its facilities and sell copies at a reasonable cost.
- - Investigate the feasibility of a modern motel-lodge-resort on the shore of the lake.
- - Clear needed boat channels through areas containing timber and snags.
- - Investigate the possibility of constructing a greentree reservoir below Lake Bistineau for a duck preserve.
- - Develop a park adjacent to the public boat launching ramp on the east side of Lake Bistineau in Bienville Parish. Land is owned by the Bienville Parish School Board.

Lake Claiborne (Claiborne)

This 6,000-acre scenic lake affords sportsmen the finest in fishing and boating. There are 2,066 acres of boat channels and open recreation areas and 3,434 acres of wooded fishing and hunting areas. The lake has an average depth of 15.7 feet and more than 40 miles of shoreline. Water poured over the spillway for the first time on May 17, 1968. The lake Claiborne Watershed District Commission is the governing body.

For full development of the lake's potential the following measures are proposed:

- - Develop additional boat launching ramps, picnic areas, and access roads to these facilities.
- - Erect signs at points of entry which explain the zoning laws and show the zoned areas. Also erect signs, discernable from a distance, which show the various zoned areas.
- - Request RC&D technical and financial assistance to control erosion on the lake dam.
- - Develop a maintenance program for the lake dam.
- - Develop a state park at the south end of the lake.
- - Encourage and endorse the fish management plan of the Louisiana Wild Life and Fisheries Commission when approved.
- - Obtain a contour map with two-foot intervals of the lake basin for use in carrying out the fish management plan.

- - Make a feasibility study of a modern motel-marina complex on the shore of the lake.
- - Advertise the lake statewide and in adjacent states. Keep an up-to-date map of the lake showing various developments and distribute as a means of advertising.
- - Investigate how a strip of state-owned land east of the dam can best be used.
- - Cooperate with Louisiana Tech in assisting Mr. Ben Coleman or others in developing a Hodges Garden type development along the lake front.
- - Secure an aerial photograph of the lake.
- - Hard surface the boat launching ramp parking area located off the Lisbon Highway.
- - Hard surface the parking area of the boat launching ramp off the Arizona Road.
- - Develop a park adjacent to the boat launching ramp off the Arizona Road.
- - Explore all sources of assistance to build a tabernacle for religious services on Lake Claiborne.
- - Install Lake Claiborne destination and information signs on state routes in the vicinity of the lake.
- - Make the large Lake Claiborne billboards more attractive and colorful.

Kepler Lake (1,925 acres) (Bienville)

To take full advantage of the lake's recreational potential, these project measures are proposed:

- - Provide technical and financial assistance for erosion control measures on the lake dam.
- - Develop the borrow area for the lake dam into a camping area and treat eroded areas.
- - Clear boat trails for additional usages such as water skiing, pleasure boating, etc.

Mill Creek Lake (Bienville)

This 580-acre lake is currently under construction. It was planned by the Louisiana Department of Public Works.

The following project measures are proposed:

- - Construct needed boat launching ramps, adjacent picnic areas and access roads.
- - Establish a meander line to determine state land boundaries.

Ivan Lake (Bossier)

This 520-acre lake was constructed on the Bayou Bodcau Reservoir in 1956 by the Bossier Parish Police Jury through the cooperation of the Department of Public Works by license agreement with the Secretary of the Army. The license also includes about 1,100 acres surrounding the lake which are being developed for recreational purposes.

To more fully develop the lake it is proposed that the management plan prepared by the Louisiana Wild Life and Fisheries Commission will be implemented. This will result in improved fishing, picnicking, swimming, boating, water skiing, and a place where the out-of-doors can be enjoyed. The Bossier Parish Police Jury is the sponsor. Assistance is needed from the Louisiana Wild Life and Fisheries Commission and the State Parks and Recreation Commission.

Kisatchie National Forest

Caney Wildlife Management Area (Webster and Claiborne)

The National Forest comprising of 31,155 acres is divided into three sections. Caney section in Webster Parish covers 12,655 acres; Middle Fork, 9,765 acres and Corney, 8,735 acres both in Claiborne Parish. With the exception of the Caney Lakes recreation area, the forest is open to public hunting under regulations established by the Louisiana Wild Life and Fisheries Commission.

Plans for the next 10 years are:

- - Development of wildlife openings.
- - Construction of wildlife waterholes.
- - Construction and reconstruction of 67 miles of multiple-purpose roads.
- - Prescribed burning.
- - Reduction in violations of game laws.
- - Planting utility rights-of-way for wildlife habitat.
- - Release of turkeys.
- - Big game range analysis.
- - Construction of a campground for hunters on the Middle Fork section.

- - Preserve and enhance the scenic beauty along and adjacent to the Lee Harris Hill Road in the Caney section.

Caney Lake Recreation Area (Webster)

This area is a major recreational facility in the project area. It comprises two lakes of about 550 acres along with facilities for camping, picnicking, skiing, boating, swimming, and fishing.

Approximately \$400,000 has been spent in improvements since 1960 and an estimated \$1 million will be spent for further improvement over the next several years.

Completed as Bossier-Webster project measures were a new skiing area, two new beaches, additional camping and picnic units, two fishing boat launches, administrative and storage buildings, a visitor-information center, trailer sewage disposal system, and new parking lots.

To better meet the existing and future public needs for outdoor recreation, the U. S. Forest Service plans include:

- - Additional camping units.
- - Additional picnicking areas.
- - Two launches for fishing boats.
- - A two-mile hiking trail.
- - Construction of an amphitheater.
- - Water and showers in all camping and picnicking areas.
- - Additional hard-surfaced roads.
- - Carry out the fish management plan for the upper lake prepared by the Kisatchie National Forest (U. S. Forest Service) in collaboration with the Louisiana Wild Life and Fisheries Commission.

Corney Lake Recreation Area (Claiborne)

This is a 2,300-acre lake with facilities for camping, picnicking, and boating. It is located in the Corney section of the National Forest.

It is proposed:

- - That the U. S. Forest Service maintain the existing facilities within their capacity and based upon expressed demand so that this site will continue to offer high quality recreation to the public.

- - Install another control structure and make necessary repairs to the lake dam.
- - Investigate the possibility of developing a greentree reservoir below the lake on National Forest land.
- - Carry out the wildlife management plan prepared by the Kisatchie National Forest (U. S. Forest Service) in collaboration with the Louisiana Wild Life and Fisheries Commission.

Bodcau Bayou Dam and Reservoir - Recreation and Wildlife Management Area
(Bossier and Webster)

This area is located in Webster and Bossier Parishes on Bayou Bodcau. It contains 32,472 acres of which 26,718 acres are woodland. The reservoir contains 357,300 acre-feet of flood control storage covering an area of 21,000 acres. There is no permanent pool.

Development of the recreational potential of the reservoir area has increased visitation to the project from an estimated 8,000 in 1955 to about 297,000 in 1965. Facilities for picnicking, camping, boat launching, and sanitary and water supply systems have been provided by the U. S. Army Corps of Engineers.

The Louisiana Wild Life and Fisheries Commission, by license agreement with the Secretary of the Army, has developed both waterfowl and upland game hunting areas. Through a supervised game management program and releases of fish and game stock, the Commission has improved the hunting and fishing of the reservoir area.

To more fully develop the wildlife potential of the area the following measures are proposed:

- - Build a new dam and water control gate at the upper end of the present greentree reservoir. This would flood about 2,000 acres of oak flats and provide more roosting and feeding areas for ducks.
- - Create a series of twelve small ponds in the refuge for fishing, picnicking, and some swimming.
- - Construct about 15 miles of fence to exclude cattle which are competing with wildlife for browse and mast crops. Benefits will be higher game carrying capacity.
- - Provide the Louisiana Wild Life and Fisheries Commission with timber marking assistance on the refuge. The Commission does not have sufficient personnel to perform this task. Money received from timber sales is used to further area development.
- - Improve and properly maintain about 15 miles of roads within the refuge.
- - Place directional signs on main entrance roads to direct visitors to fish ponds.

- - Endorse the hiring of additional personnel to further develop the area.

Timber production data for this area is in the Forestry section of this plan.

Jackson-Bienville Wildlife Management Area (Bienville)

This is one of 20 privately-owned wildlife management areas in the State which is leased by the Louisiana Wild Life and Fisheries Commission. Total area is 22,000 acres with about 9,900 acres located in Bienville Parish.

To take full advantage of the area's recreation potential, it is proposed that the Louisiana Wild Life and Fisheries Commission implement the following project measures:

- - Construct a small fishing lake.
- - Construct weirs on Dugdemona Creek to maintain a constant water level so it will not dry up during drought periods.
- - Develop camping areas to be used during the deer hunting season. The sites to be provided with a permanent water supply.
- - Maintain the road system.

Louisiana Army Ammunition Plant (Webster and Bossier)

- - Develop and implement a wildlife plan for the 11,601-acre plant grounds.
- - Endorse managed hunts for deer jointly managed by the Department of the Army and the Louisiana Wild Life and Fisheries Commission when the security measures are relaxed.
- - Develop the federally-owned land lying between a proposed public road through the plant grounds and the Dorcheat Bayou into a forestry and wildlife area.

Game Management on Rights-of-Way

There is a vast acreage of land in the project area being used by utility companies for pipeline and transmission rights-of-way. When these rights-of-way cross woodland, this acreage is lost from timber production. These rights-of-way could be planted in vegetation which will provide food and cover for wildlife.

This project measure proposes that a program be initiated with the objective of better utilization of unused rights-of-way for wildlife habitat. Assistance from all agencies, private industry, and others concerned is needed.

Field Trial Area for Bird, Rabbit, and Retrieving Dogs (Bossier)

Establish a field trial course within the project area with trap and skeet ranges included to further utilize the land. The area should be approximately 1,000 acres, 15 to 35 per cent wooded, and have several ponds.

Rifle and Pistol Ranges (Webster)

Assist the Webster Parish Wildlife and Sportsman Club construct a rifle, pistol, and archery range on public property near Minden. The U. S. Forest Service has been requested to lease an area for this purpose. A RC&D-FHA recreation loan is needed.

Upland Game Research Center (Bossier and Webster)

Establish a research facility to study ways of improving upland habitat for game, the use of exotic birds, and other methods of land utilization that would benefit upland game. Also, study ways in which deer damage to crops can be prevented. This area could be used by the school of Land Management of Louisiana Tech.

Turkey Release Sites (Bienville)

Assist the Louisiana Wild Life and Fisheries Commission in selecting suitable release sites for turkey.

Beaver Damage (Bienville)

Assist in locating beaver damage and notifying Louisiana Wild Life and Fisheries Commission.

Gun Safety Schools

To help in reducing hunting accidents and promoting gun safety, conduct gun safety schools for all age groups through the Jaycees, Sheriff's Department and Louisiana Wild Life and Fisheries.

Mark State Lines (Bossier, Webster, and Claiborne)

Mark the lines between Louisiana and Arkansas to assist hunters from straying into the wrong state while hunting and also to assist the Louisiana Wild Life and Fisheries Commission in law enforcement.

Game Management on Large Private Land Holdings

Encourage large landowners to allow free public hunting, to institute a game management program or incorporate their lands into a game management area.

Dorcheat, Black Lake and Bodcau Bayous (Webster, Bossier, and Bienville)

Clear boat trails on these bayous to make these areas accessible to hunting, fishing, boating, camping, and nature study. Develop launching

and picnic sites on these streams near each community and make them accessible by roads.

Pollution Abatement

Assist the Pollution Control section of the Louisiana Wild Life and Fisheries Commission and other interested agencies to improve bodies of water for wildlife and recreation by pollution abatement.

Winford Recreation Park (Webster)

Develop a recreational area on the 182 acres of worked-out gravel pit land west of Minden which was donated to the Webster Parish Police Jury by the Winford Investments, Inc. Camping areas for tents and trailers, swimming, retriever area, parking areas, fishing, and picnicking will be provided. Assistance is needed from Louisiana Parks and Recreation Commission, Soil Conservation Service, Louisiana Department of Public Works, the Louisiana Wild Life and Fisheries Commission, Louisiana Cooperative Extension Service, and the Louisiana Department of Highways. Matching funds are needed from the Land and Water Conservation Fund. Services in kind, maintenance of the facilities and other matching funds are needed from local sources.

Homer Recreation Area (Claiborne)

Provide RC&D technical and financial assistance to establish measures needed for water and erosion control. Included in this area are a golf course, baseball field, riding arena, and a National Guard Armory building and grounds.

Cypress Lodge Country Club (Webster)

A nine hole golf course, club house, swimming pool, tennis court, and fish pond were developed as a Bossier-Webster project measure. RC&D technical assistance was provided.

Long range plans call for a 18-hole golf course, baseball diamond, riding trails, and an archery range.

Eastwood Fairways (Bossier)

Plans for this 64-acre country club include a nine hole golf course, six small lakes, swimming pool, a wading pool and playground for children, and a two-story colonial clubhouse.

RC&D technical assistance is needed.

Bienville Parish Golf Course (Bienville)

This golf course is one of the facilities planned for a 220-acre tract of land to be developed into a parish-wide park.

RC&D technical assistance, a FHA-RC&D recreational loan, and other financial assistance are needed. The Bienville Parish Recreation District No. 1 is the sponsor.

Commercial Recreation Facilities on Private Lands

The objective of this project measure is to provide landowners counseling and assistance in planning and developing their lands for income producing recreational enterprises and activities. These activities could include hunting, fishing, horseback riding, picnicking, hiking, swimming, water skiing, and commercial production of buffalo and catfish.

Specific projects are:

O. G. Armour Farm (Webster)

This is a 500-acre commercial recreational development in Webster Parish involving swimming, fishing, horseback riding, and picnicking. A motel and restaurant have been constructed.

Pleasure Point (Claiborne)

This is an ideally located tract of land on the south shore of Lake Claiborne. The owner, Mr. Sidney Peterson, plans a model recreation farm featuring water-based sports.

Ben Coleman Farm (Claiborne)

This project calls for a Hodges Garden type development near Lake Claiborne.

Scotty Woodard Farm (Bienville)

Preliminary plans call for a recreational complex offering facilities for outdoor sports. Assistance is needed from the Agricultural, Stabilization and Conservation Service; Soil Conservation Service; Louisiana Wild Life and Fisheries; Louisiana Cooperative Extension Service; and Fish and Wildlife Service.

Randy McMahan Memorial Baseball Park (Webster)

This park in Springhill includes regulation size baseball and softball fields and stadium. Official dedication is expected next year.

Dogwood Trail (Bossier)

The Plain Dealing Dogwood Drive traverses 14 miles of Ozark Spur, the most precipitous and scenic highlands of Louisiana. The route is lined with thousands of dogwood trees. At several points on the drive, one may look into three states. Thousands of people make the drive each spring when the dogwoods are in bloom. The drive is sponsored by the Plain Dealing Junior Chamber of Commerce.

To more fully develop the potential of the scenic drive the following project measures are proposed:

- - Develop horseback riding trails.
- - Develop a nature study area where different species of plants are labeled.
- - Clean up the trail and improve the road.
- - Plant flowering shrubs on several areas as additional beauty spots.
- - Improve overlooks by clearing brush obstructing vision. Erect signs describing the views.
- - Improve directional signs.
- - Develop several picnic areas along the trail.

Cypress-Black Bayou Recreational Area (Bossier)

The area containing 310 acres will be developed into a recreation area adjacent to the Cypress Bayou Reservoir. Facilities will include play grounds, hiking trails, tent and trailer sites, a marina, boat launching ramps and docks, picnic areas, swimming area, and a nature study area.

Public Law 566 will provide cost-sharing for construction, installation services, and land needed for the development. Total estimated cost is \$1,042,962, of which \$513,776 is to be paid by PL-566 and \$529,186 is to be paid by other funds.

Technical and financial assistance is needed by the sponsors, the Dorcheat Soil and Water Conservation District and the Cypress-Black Bayou Recreation and Water Conservation District.

Bicycle Paths

Develop and maintain bicycle paths which would follow existing travelways, such as woods roads, fire lanes, utility rights-of-way, and others.

Naming of Parish Roads and Streams (Bossier and Webster)

This project measure proposes that the Webster Parish Police Jury designate parish roads with their common or colloquial names instead of numbers with the names posted on signposts at appropriate places. It is also proposed that the Bossier and Webster Parishes' Police Juries post the names of the various bayous and creeks at the intersections of the parish roads and the streams.

The names would be more meaningful to the public and add interest and color. The local inhabitants could assist in the naming through a publicity campaign.

Bienville Parish Park (Bienville)

Assist the Bienville Parish Recreational District No. 1 to develop a recreational park on a 220-acre tract of land one mile south of Arcadia. The park will include picnic, playground and ballfield areas, golf course, fish pond, trails, and supporting facilities. Parish voters approved a two mill tax to support the District's activities.

Assistance is needed from the Louisiana Parks and Recreation Commission, Louisiana Department of Public Works, Soil Conservation Service, Louisiana Wild Life and Fisheries Commission, and Extension Service. Matching funds are needed from the Land and Water Conservation Fund. A RC&D recreation loan is needed from the Farmers Home Administration. Services in kind, maintenance of facilities and other matching funds and grants are needed from State and local sources.

Koran Community Recreation Center (Bossier)

Explore all possible ways to obtain financial and technical assistance for developing a community recreation center in the Koran Community. Some 300 persons in the community have signed a request for assistance. A committee of five has been formed to act for the community.

Dorcheat Bayou Boat Launching Ramp and Park (Webster)

This project measure involves the development of a 3-acre tract of land located on the Dorcheat Bayou near Dixie Inn.

A boat launching ramp and parking area have been constructed on about one-half of the tract. The remaining land will be developed into a park with picnic facilities and beautified.

Assistance has been received from the Louisiana Wild Life and Fisheries Commission, Louisiana Department of Public Works, Bureau of Recreation, Webster Parish Police Jury, the town of Dixie Inn which furnished the lighting, and the Soil Conservation Service for the park plan. Further assistance is needed from the Louisiana Highway Department.

The Webster Parish Police Jury is the sponsor.

Lewisville Church Recreation Center (Bossier)

Involves the development of nine acres of church property into a recreational area.

The Soil Conservation Service will provide the plan. Other sources of technical and financial assistance will be sought.

Recreation Potential Appraisal

This project measure calls for an appraisal of potential for outdoor recreational developments for the project area. Eleven different developments will be examined for potential.

Among other uses the appraisal will be a source of information for planning future recreational enterprises and provide an incentive for developing them.

The Bossier and Webster Parishes' appraisal has been published as a RC&D project measure. The Bienville and Claiborne Parishes Technical Action Panels with the assistance of the RC&D Recreation and Tourism Committees are developing the appraisals for those parishes. RC&D assistance is needed for publishing the report.

Park Development (Claiborne)

Explore all possible sources of assistance for further developing the town-owned, Jaycee-operated park in Homer.

Park Improvement (Claiborne)

Improve the Homer Municipal Park, the adjacent Homer Memorial Hospital grounds, and adjoining school grounds by landscaping and improving and repairing existing facilities.

Arcadia Recreational Facilities (Bienville)

Explore all sources of assistance for the construction of a swimming pool and other recreational facilities in the Arcadia area.

Port of Entry (Claiborne)

Establish a State port of entry with scales and tourist information center between Summerfield and Junction City.

Roadside Parks (Claiborne, Bossier)

Construct additional roadside parks and rest areas.

Tour Brochure (Webster)

Develop a recreational, historical, and scenic tour brochure of places of interest in the project area. The Minden Chamber of Commerce is the sponsor with the Webster Parish TAP assisting.

Historical Publication (Claiborne)

The Claiborne Parish Historical Association is publishing Volume IV of "Historic Claiborne". The Soil Conservation Service is requested to furnish an aerial photograph of the town of Homer for inclusion in the book.

Historic Reprint (Claiborne)

Explore all sources of subsidy for reprinting the Hulse and Harris "History of Claiborne Parish" (1886).

Historic Sites (Claiborne)

Explore all sources of assistance in restoring and preserving historic sites in Claiborne Parish. A specific project is the preservation of the McKenzie Home in Homer for its historic and cultural value.

Herbert S. Ford Memorial Museum (Claiborne)

When Mr. Ford returned from World War I with a few war mementos, he had no idea that these items would be the nucleus of a museum to live on long past his time. But as a result of his keen interest in history and the continuing interest of many today, the Herbert S. Ford Memorial Museum is an outstanding reality in Homer.

The town of Homer owns the collection and the Homer Lions Club has the continuing development of the museum as one of its major projects.

This project measure proposes that funds be sought for:

- - Improving its physical facilities.
- - Providing consultant services for the administration and program of the museum.
- - Providing consultant services for proper housing of books and documents.

Claiborne Jubilee (Claiborne)

This unusual springtime celebration, inaugurated last year, schedules a wide variety of entertaining events. Programs include the Miss Claiborne beauty pageant, musical shows, tours of interesting homes, a visit to the Ford Museum, a flower exhibit in Claiborne's ante bellum courthouse, and an heirloom show. For the sports fans there are a fishing rodeo on Lake Claiborne, a golf tournament in Haynesville, and water shows.

This project measure proposes that all possible assistance be given to the Jubilee officers and committee members and to the many organizations and individuals throughout the parish who are participating in holding the celebration.

Mt. Lebanon Historical Tour (Bienville)

The Mt. Lebanon Historical Society sponsors an annual "Stage Coach Trail Tour" in Bienville Parish. Included in the tour are five ante bellum homes, the Mt. Lebanon Cemetery, and the Mt. Lebanon Baptist Church and Historical Museum. Thousands of people make the tour each year.

This project measure proposes that all possible assistance be given the historical society in holding the tour.

Archeological Survey

Archeological and historic sites constitute a nonrenewable resource. Once destroyed without records, they cannot be recreated.

Very little research is being conducted by professional and amateur investigators in the project area. Consequently, sites and information are disappearing at a greater rate than they can currently be recorded. The total loss is being increased by pothunting, agricultural practices, water development projects, urban and industrial expansion, highway construction, and many other projects which are changing the face of the land.

This project measure proposes that an archeological survey be made so that important sites can be located, studied, and salvaged before they are destroyed.

Technical assistance from the National Park Service is needed.

Germantown Communal Farm (Webster)

This farm, seven miles northeast of Minden, was settled in 1835 by a colony of Germans. The colony prospered and became an important place in the community for a number of years. Several buildings constructed by the colonists from hand-hewed logs are still standing. A priceless collection of documents, tools, firearms, etc. used by the colonists has been preserved by some of the descendants.

The descendants who own this farm and collection have for years sought assistance in restoring the buildings.

This project measure calls for the restoration of the buildings and the development of a museum at this historic site.

A sponsoring organization is needed and a matching grant sought through the National Historic Preservation Act of 1966.

Rocky Mount Restoration (Bossier)

Assist the Bossier Restoration Foundation to restore the Jim Hughes home and eventually a ten-acre area given to the Foundation for a Civil War settlement tourist attraction.

The secession movement in Louisiana first took form in the Hughes home on November 26, 1860. On that day at the home, local people organized the Minute Men of Bossier Parish. Subsequent activities led to the parish's being on a wartime basis before the Confederates shelled Fort Sumter.

The Hughes house is to be restored as the first step in the area restoration. It will then be used as a museum. Future plans call for the building of a country store, farm blacksmith shop, school house and syrup mill.

A matching grant is needed through the National Historic Preservation Act of 1966.

Shed Road (Bossier)

The Shed Road was one of the most unique covered roadways in the south. It was constructed in 1870's from the hills of Red Chute to the bottomlands near Red River in Bossier City, a distance of nine miles.

The shed-covered road replaced the rough and muddy roads of the area and made possible wagon and stagecoach travel throughout Northwest Louisiana and South Arkansas during the wet season. Trade would otherwise have been cut off until spring since the whole territory became a sea of mud in the rainy season.

This project measure proposes that assistance be given the Shed Road Restoration sponsors to reconstruct portions of this famous road and develop a museum and park as a tourist attraction.

Preservation of Old Landmarks (Bossier)

Assist in preserving and restoring old landmarks at Collinsburg, one of the oldest settlements in Bossier Parish and Coushatta Bluff on Red River.

In conjunction with this project measure, develop a nature trail from Coushatta Bluff to Rocky Mount, a distance of about seven miles. Along this trail is Coushatta Path, an old Indian trail that passes through Collinsburg. Boy Scouts have already developed some of this trail.

Keep Bossier Beautiful Club Program (Bossier)

This project measure calls for encouragement and support for the Club's program of beautification of Highway 3 from Bossier City to Plain Dealing. The 160 home owners along the highway are encouraged to plant dogwood trees.

Beautification of Turner's Pond (Webster)

Provide RC&D technical planning assistance to the Minden Beautification Council for landscaping Turner's Pond in Minden.

Nature Study Area (Bossier)

A unique nature study area and building will be included in the Cypress Lake recreation area. The study area will cover about 130 acres now growing various species of trees and native shrubs. Other trees and plants will be introduced to complement the present ones. They will be labeled with their scientific and colloquial names. Food plantings and protection of natural cover will increase wildlife. The area will be declared a bird sanctuary.

The building will support activities in the nature area and will include displays of trees and plants.

The Cypress-Black Bayou Recreation and Water Conservation District Board of Commissioners was given 84 acres of land in the area. The board will dedicate its appraised value for the construction of the building.

Technical and financial assistance will be needed.

Interstate 20 Rest Areas (Bienville)

Two picnic and rest stop areas are under construction on each side of I-20 between Minden and Gibsland. The areas will provide sheltered concrete picnic tables and barbecue pits, trailer sewerage disposal units and refill water tanks, and comfort stations.

The Louisiana Department of Highways are the sponsors.

Rifle and Pistol Range (Claiborne)

This project measure proposes that a rifle and pistol range be constructed near Homer.

Land for the range and technical and financial assistance are needed.

Pipe's Trailer Park (Webster)

Provide RC&D technical assistance in developing a trailer park on George Pipe's farm near the Interstate 20 - Dubberly interchange.

Ewell Street Park (Webster)

This project measure proposes that RC&D technical assistance be provided the Minden Recreation Commission in developing the city-owned park.

Conservation Fund Revenues (Webster)

Support legislation for all State conservation fund revenues generated by the Louisiana Wild Life and Fisheries Commission to be retained for use by the Wild Life and Fisheries Commission and distributed equally throughout the State.

Minden Recreation Centers (Webster)

Construction is underway on two buildings, each to contain about 6,400 square feet of floor space. Each center will contain a gymnasium, game room, lounge, office space, storage facilities, and restrooms.

The city of Minden and the city Recreation Commission are the sponsors.

Not included in this section of the plan are a number of Bossier-Webster project measures that have been completed.

Streams and lakes are places to fish and play,
as well as to beautify the countryside.

Water Resources





Flood Control

Industrial and
Municipal use



Recreation

Irrigation



WATER RESOURCES

Situation

Drainage patterns in the project area vary from well defined in the upland areas to poorly defined in the Red River bottom. Relief ranges from approximately 140 feet in southern Bossier Parish to 535 feet in eastern Bienville Parish.

Surface Streams

All but a very small portion of the surface water from the four parish area eventually drains into Red River through a series of smaller bayous and rivers. A small part of western Bossier Parish between Benton and the Arkansas line drains directly into Red River through several smaller streams. Surface water quality varies from good to poor throughout the area. Oil field and paper mill wastes contribute to pollution in some streams. Surface water quantity is variable with large amounts available during the winter and spring months.

Bienville Parish - The major streams in Bienville Parish are Loggy Bayou, Dorcheat Bayou, Black Lake Bayou, Saline Bayou and Dugdemona River. Dorcheat Bayou drains into Loggy Bayou and thence into Red River. Black Lake and Saline Bayous drain into Saline River and thence into Red River. Dugdemona River drains into Little River, thence into Black River and finally Red River.

Bossier Parish - The major streams in Bossier Parish are Flat River, Red Chute Bayou, Bayou Bodcau, Bayou Dorcheat and Loggy Bayou. Loggy Bayou drains into Red River and also serves as the outlet for all the streams listed above.

Claiborne Parish - The major streams in Claiborne Parish are Corney Bayou, Bayou D'Arbonne, Middle Fork of Bayou D'Arbonne, and Black Lake Bayou. The first three streams listed above drain into Ouachita River, thence into Black River and finally Red River. Black Lake Bayou drains into Saline River and Saline drains into Red River.

Webster Parish - The major streams in Webster Parish are Dorcheat Bayou, Bayou Bodcau, and Black Lake Bayou. The first two drain into Loggy Bayou, and thence into Red River. Black Lake Bayou drains into Saline River and thence into Red River.

Groundwater

Availability of groundwater is relatively constant throughout the four-parish area except for a relatively narrow area near Red River. Water quality varies throughout this area also. Both soft and hard groundwater is found. The elevation to the base of fresh groundwater in the area ranges from approximately 100 feet above sea level to 1100 feet below sea level.

Bienville Parish - Small to moderate supplies of soft water are found in the west and southwest portions of the parish. Moderate to large supplies of soft water are found in the remainder of the parish. Elevation of the base of fresh groundwater varies from approximately 100 feet above sea level to 1100 feet below sea level. Intermediate sands containing salt water are found in a small area near the southwest corner of Webster Parish.

Bossier Parish - Small to moderate supplies of soft water are available in the central and southeast parts of the parish. Moderate to large supplies of hard water and small to large supplies of soft water are available along the west side of the parish, generally following the Red River bottom. The north central and northeast parts of the parish have moderate to large supplies of soft water. Elevation of the base of fresh groundwater varies from approximately 100 feet above sea level to 400 feet below sea level.

Claiborne Parish - Moderate supplies of soft water are found in the entire parish. Elevation of the base of fresh groundwater varies from approximately 300 feet below sea level to 800 feet below sea level.

Webster Parish - Moderate supplies of soft water are found in all of the parish except the southwest corner where small to moderate supplies of soft water are available. Elevation of the base of fresh groundwater varies from approximately 100 feet below sea level to 400 feet below sea level.

Structural Measures

General

The complete development of the area's water resources is a major key to future growth and economic development. A number of reservoir sites located throughout the four parishes can be developed to conserve soil and water and bring about improved land utilization. The water that can be supplied by these reservoirs is certain to be needed if the area enjoys development on a par with the rest of the country. Such programs also reduce flood hazards and provide a more stable supply of high quality water for agricultural, municipal, recreational, and industrial uses.

Inventory

An inventory of existing and potential reservoirs shows:

- - Four reservoirs installed under the Public Law 566 watershed program with water storage allocations including flood prevention, fish and wildlife, and municipal and industrial purposes. These reservoirs are in two watershed projects, Upper West Fork-Cypress Bayou and Lower Bayou Toulon.
- - Two reservoirs are in the design and construction stage in the Cypress-Black Bayou PL-566 watershed project. Allocations of water include irrigation, recreation, and municipal and industrial purposes.

- - Eleven potential reservoirs located in two potential PL-566 watershed projects, Posten Bayou and Black Lake Creek. Allocations of water include flood prevention, recreation, and municipal and industrial purposes.
- - Twenty-five potential reservoirs located in community-type projects where groups of reservoirs along with needed channel improvement would have to be installed simultaneously with each group to realize full benefits. These are similar to the PL-566 projects but generally involve smaller areas and less complicated problems. These 25 reservoirs are located in seven separate groupings. Allocations of water include flood prevention, conservation storage, and recreation purposes.
- - Eighty-six potential reservoirs classified as individual community-type projects. These reservoirs could be installed individually and separately from any other reservoir. Allocations of water include conservation storage, municipal and industrial, and recreation purposes.
- - Eight reservoirs installed by other federal and state agencies with water allocations including recreation, municipal and industrial, and flood prevention purposes.
- - Six potential reservoirs located by other federal and state agencies with water allocated to recreation and municipal and industrial purposes.

This inventory is available at the Soil Conservation Service office in each parish. Reservoir sites are shown on the Water Resources map in this plan.

Potential PL-566 Watersheds

Bienville Parish - Black Lake Creek Watershed is a potential PL-566 watershed predominantly in Bienville Parish. One reservoir would be located in Claiborne Parish. There are 32,900 acres in this watershed.

Structural measures included would consist of 8 reservoirs and approximately 13 miles of channel improvement. Six reservoirs would be single-purpose flood prevention, one multiple-purpose flood prevention, one multiple-purpose flood prevention and recreation, and one multiple-purpose flood prevention, recreation, and municipal and industrial water storage. The channel improvement would be for flood prevention. The estimated installation cost including channel improvement is \$2,100,000.

Bossier Parish - Posten Bayou Watershed is located in the northwestern part of Bossier Parish. Project purposes would be flood prevention, agricultural water management, and recreation. This area is being considered for location of a Boy Scout summer camp grounds in which one or two recreational reservoirs would be needed. There is a potential for three multiple-purpose reservoirs for flood prevention and recreation, a recreational development with minimum basic facilities, and about 16 miles of channel improvement for flood prevention and agricultural water management. The total estimated cost is \$1,780,000.

Potential Community-Type Structural Measures - Group

Bienville Parish - Saline Bayou Watershed is a potential community-type project. There are approximately 7,500 acres in this watershed.

Structural measures included would consist of two single-purpose flood prevention reservoirs and approximately four miles of channel improvement, all for prevention of flooding of agricultural areas and portions of the community of Arcadia.

The estimated installation cost including channel improvement is \$376,000.

Claiborne Parish - There are 20 potential reservoirs located in five community-type group projects in Claiborne Parish.

Leatherman Creek Watershed contains approximately 30,000 acres. Structural measures included would consist of five single-purpose flood prevention reservoirs and three reservoirs that would have flood prevention, conservation storage, and recreation as purposes. There would be approximately nine miles of channel improvement for flood prevention. Flood protection would be obtained by agricultural farmland located in Leatherman Creek Bottom and, also parts of the community of Athens. The estimated installation cost including channel improvement is \$2,300,000.

Beaver-Cypress Creek Watershed contains approximately 15,000 acres. Structural measures included would consist of three single-purpose flood prevention reservoirs and one reservoir that would have flood prevention, conservation storage, and recreation as purposes. There would be approximately five miles of channel improvement for flood prevention. Agricultural lands would benefit from reduced flooding in this project. The estimated installation cost including channel improvement is \$1,000,000.

McCasland Creek watershed contains approximately 17,900 acres. Structural measures included in this project would consist of two single-purpose flood prevention reservoirs and two reservoirs for flood prevention, conservation storage, and recreation. There would be approximately 6 miles of channel improvement for flood prevention. Agricultural lands would benefit from reduced flooding in this project. The estimated installation cost including channel improvement is \$1,300,000.

Reeder-Middle Fork Bayou D'Arbonne Watershed contains approximately 9300 acres. Structural measures included would consist of two single-purpose flood prevention reservoirs and one reservoir for flood prevention, conservation storage, and recreation. There would be approximately six miles of channel improvement for flood prevention. Agricultural lands and the town of Haynesville would benefit from reduced flooding in this project. The estimated cost of installation including channel improvement is \$838,000.

Lick Creek Watershed contains approximately 3600 acres. Structural measures included would consist of one flood prevention reservoir and approximately three miles of channel improvement for flood prevention. Agricultural lands would benefit from reduced flooding in this project.

The estimated cost of installation including channel improvement is \$191,000.

Potential Community-type Structural Measures - Individual

Bienville Parish - There are 29 potential reservoirs of this type in Bienville Parish. Purposes would include conservation storage, municipal and industrial storage and recreation storage.

Bossier Parish - There are five potential reservoirs of this type in Bossier Parish. Water could be stored for recreation, irrigation, municipal and industrial use, and conservation storage.

Claiborne Parish - There are 42 potential reservoirs of this type in Claiborne Parish. Water could be stored for recreation, municipal and industrial use, and conservation storage.

Webster Parish - There are ten potential reservoirs of this type in Webster Parish. Water could be stored for recreation, municipal and industrial use, and conservation storage.

Other Potential Reservoirs - Federal and State

Reservoirs under this grouping include those investigated by the Louisiana Department of Public Works and the U. S. Army Corps of Engineers.

Other Potential Projects

Bossier Parish

The U. S. Army Corps of Engineers has found navigation on Red River to be economically feasible as far north as Shreveport, Louisiana on the main stem, and along the Twelve Mile-Cypress Bayou tributary to Daingerfield, Texas. The estimated cost of construction for navigation is \$353,718,000. Bank stabilization was found justified from Shreveport to Denison Dam. The estimated cost of construction for bank stabilization is \$136,013,000.

The U. S. Army Corps of Engineers has an authorized flood control project in the Red River Bottom area of Bossier Parish that involves both levee construction and channel excavation. The estimated cost of this project is \$2,240,000 federal and \$893,000 non-federal. Planning is underway.

Little Cypress Bayou watershed is just south of Plain Dealing. It is located within the PL-566 Cypress-Black Bayou Watershed. The extent and cost estimate of needed works of improvement has not been made at this time. Additional study is needed to make this determination. Flooding of pasture and cropland occurs beginning at the lower end of the present channel improvement on Little Cypress Bayou and extends approximately one mile. Below this point there is no open land in the flood plain. Flood damage occurs to a parish highway in the vicinity. Channel improvement is needed to alleviate the problem.

Claiborne Parish - Vast iron ore reserves and imminent technological breakthroughs indicate that the area and especially Claiborne Parish, should soon develop an iron and steel industry of substantial proportions.

Claiborne Parish has all the natural resources except water supply and water transportation necessary to support an iron and steel industry at any level of development. Recently completed 6,400 acres, 100,000 acre-foot, Lake Claiborne should supply sufficient industrial water for a minimum scale 1,000 ton per day iron and steel industry. Moderate scale development would require the building of several additional similarly sized water reservoirs and at the Birmingham level of 4,500 tons per day or higher, would require the development of large scale ground water supplies or the piping of substantial quantities of industrial water from the Ouachita River 70 miles to the east, and also probably would warrant the addition of two more lakes, four locks, and a navigation channel in the D'Arbonne Basin to provide barge transportation from the Homer area to the Mississippi waterways system via the already navigable Ouachita River.

Advance planning of potential industrial water reservoirs in Claiborne Parish, ground water supplies, and preliminary engineering of a navigable waterway in the D'Arbonne Basin are needed at this time.

Project-wide - The Louisiana Wild Life and Fisheries Commission and the Louisiana State Parks and Recreation Commission have compiled a preliminary list of potential scenic rivers. These are streams that would be preserved in their natural state. Those located in the project area are Dugdemona Bayou, Bayou Bodcau, Bayou Dorcheat, Black Lake Creek, Middle Fork of Lake D'Arbonne, Corney Creek, and Saline Bayou.

According to the above agencies, a study of the proposed streams should precede designation as scenic rivers and legislation passed authorizing the program.

Project Measures

Water Resources Inventory

Make an existing and potential water impoundment site inventory listing location, drainage area, estimated size, possible use and estimated installation cost along with a map showing the reservoir sites.

This inventory will provide a ready reference for water storage sites which can be used for flood prevention, municipal and industrial purposes, recreation, fish and wildlife, and irrigation.

RC&D technical and financial assistance will be needed.

Cypress-Black Bayou Watershed (Bossier)

Cooperate with the sponsors of the Cypress-Black Bayou Watershed in the development of the works of improvement for the project.

This 148,500-acre watershed is located in the western part of Bossier Parish. Structural works of improvement consist of two multiple-purpose reservoirs for irrigation, recreation, and municipal water; a recreational development with minimum basic facilities; about 55 miles of channel improvement for flood prevention and agricultural water management; and 11 weirs, 2 pumping plants, and a water control structure to provide better distribution and management of irrigation water. Construction has not started on any of these. Design surveys are in progress. This project is sponsored by the Dorcheat Soil and Water Conservation District and Cypress-Black Bayou Recreation and Water Conservation District. The estimated PL-566 cost of the project is \$3,912,438, and from other funds is \$4,359,221. The estimated annual cost is \$369,573 and the estimated annual benefits are \$667,327.

Water Transportation Facilities (Claiborne)

A low cost, waterborne transportation system would be required for the iron and steel industry which is being sought for the area.

Advance planning and preliminary engineering surveys are needed for a navigable waterway in the D'Arbonne Basin to provide barge transportation from the Homer area to the Mississippi waterways via the already navigable Ouachita River.

It is proposed that all sources of assistance be explored to obtain these needs.

Bayou Bodcau Flood Control (Bossier)

This project consists of levees and channel improvements which would afford protection against a 25-year headwater flood and a backwater flood resulting from a recurrence of the 1945 flood on Red River under 1962 reservoir conditions. The work would provide for extension of the existing levee along Cypress Bayou, Cross Bayou, Red Chute Bayou, Flat River-Loggy Bayou, and Cutoff Bayou. Enlargement of the Flat River Channel and channel clearing and snagging on Red Chute Bayou would be included in the project.

This is a U. S. Corps of Engineers project. Estimated cost is \$1,840,000 Federal and \$818,000 non-Federal.

Navigation and Bank Stabilization of Red River (Bossier)

It is proposed that sufficient federal funds be made available to carry out the U. S. Army Corps of Engineers proposed project for navigation and bank stabilization on Red River.

More details pertaining to the project are listed under "Other Potential Projects".

Dorcheat Bayou Development (Webster)

It is proposed that studies be made by the Corps of Engineers to determine the advisability of the proposed development project for the Dorcheat Bayou.

The project includes the construction of three reservoirs. One reservoir located in Arkansas would impound 17,500 acres of water. The other two would be in Webster Parish between Minden and Springhill and impound 30,000 acres and 22,500 acres of water for industrial needs, municipalities, flood control, and recreation. Navigation on the bayou also is planned.

The Dorcheat Bayou Association is the sponsor.

Mile Creek - Cooley Branch (Webster)

This proposed watershed development in Webster Parish includes three multiple-purpose reservoirs and 9.4 miles of channel improvement. The reservoirs would provide for conservation storage of water to bring about improved land utilization and flood detention storage.

Site 1 would contain a surface area of about 500 acres of water at principle spillway elevation; site 2, 140 acres; and site 3, 205 acres.

The total installation cost is estimated to be \$3,063,800 with \$2,194,160 Federal funds and \$869,640 non-Federal.

Ground Water Study

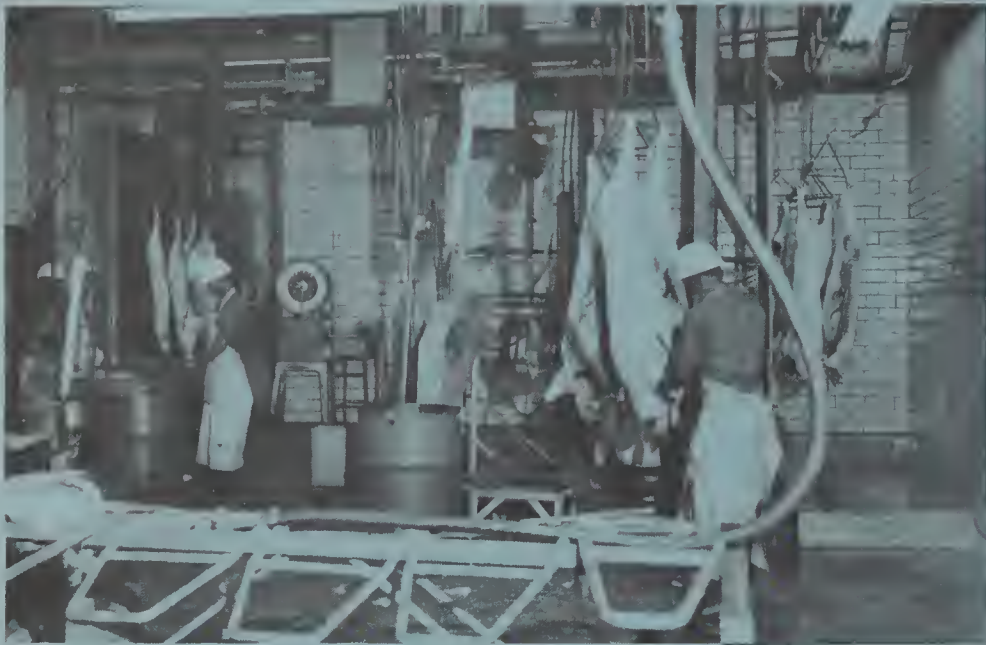
It is proposed that the State Departments of Public Works and Geological Survey be asked to determine the feasibility of the following:

- - That a study and plan be made of existing aquifers which furnish water to municipalities in the RC&D Project area. This plan is to include areal extent, depths, and recharge areas.
- - Studies and recommendations be made of pumping routines and well spacings to provide maximum beneficial use of aquifer supply.
- - Studies and recommendations to be made on the best means of handling recharge areas to provide maximum recharge of aquifers.
- - Secure advice on cooperation possible if recharge area is of multi-parish/county extent and probable program of recommended land treatments to preserve recharge area at its best condition for aquifer recharge.
- - Make a feasibility study and submit recommendations for disposal of spray liquids for aquifer reabsorption.
- - Explore all available means for financing adopted programs.

Community and Rural Development



The Minden Airport erosion control project measure is one of many examples of how the Trailblazer 4 RC&D Project helps cities, towns, and communities in the four parish area.



Industry



Community Facilities



Conservation Education



Vocational Training

COMMUNITY AND RURAL DEVELOPMENT

General

Of all our resources, the most valuable is people.

The RC&D Project's major objective is to help people by encouraging the full development of all resources in communities as well as in the surrounding rural areas. The program is directed toward establishing community facilities, such as water and sewage systems; improvement of educational and health services; improved roads, parks, libraries; attracting more industries and providing more facilities for job training and cultural activities.

In recent years progressive communities have grown in both land area and population. The outlook is for continued growth if they continue to progress.

Other communities, located from the main lines of transportation and developed areas, have declined in population. The vitality of their social and economic life has dwindled also. In a society geared to progress and development, these communities must develop some advantages -- economic, social, and cultural -- if they are to attract people and industry which tend to go to the cities.

Some communities in the project area offer many facilities. Included are telephones, electricity, gas, water and sanitation systems, modest land costs, and space for community growth. Hard-surfaced roads and highways make these towns easily accessible. Schools offer comprehensive education. Health units and hospital facilities are also available.

Problems, Needs and Opportunities

Population Trends

Parish	1950	1960	Percent Change
Bienville	19,105	16,726	-12.5
Bossier	40,139	57,622	43.6
Claiborne	25,063	19,407	-22.6
Webster	35,704	39,701	11.2
Project Total	120,011	133,456	11.2

Communities

Past population trends of the larger communities show an increase in population since 1950. Bossier City, Minden, Springhill, Arcadia, and Gibsland have had increases. The smaller communities generally show decreases with the exception of those in Bossier Parish, all of which have had increases.

Lack of Job Opportunities

This loss in population is in part the result of a lack of job opportunities within the area. Many residents have been forced to seek employment in the more highly industrialized cities in the north and west. Others have had to earn their livelihood outside the area and this has caused a high out-commuter ratio.

This out-migration is expected to continue unless some success is experienced in securing new industry and the further development of the natural and related resources by the people. The area has great potentials in mineral, forest products, livestock, poultry, recreation and tourism, and other resources which need further exploration and maximum development.

Community Development

The communities that have grown as well as those with declining populations are plagued with problems. Both face inadequate community services and financial problems.

These communities need encouragement and guidance in initiating a program directed toward developing modern public facilities and services and a quality environment.

Income

	Bienville	Bossier	Claiborne	Webster	Project Area
Median Family Income, 1960	\$2,586	\$4,568	\$2,868	\$4,055	\$3,920

This compares to median family income for the state, which was \$4,272 and \$5,660 for the United States.

The median farm family income for the project area was \$2,544.

This data indicates that the income level of a large portion of the population is too low to adequately support the family unit at a level of living comparable to other areas.

Opportunities for resource development and the investment of funds directed toward attracting fast-growth industry and other long-term job-making enterprises should be thoroughly explored. Special emphasis should be placed on attracting industries that require skilled workers. These will contribute more to the growth of the area in higher wages and salaries than those industries that require limited amounts of unskilled labor.

Urban and Industrial Areas

New and different kinds of problems have been created by the drastic changes in land use brought about by urban and industrial growth.

Great losses occur as storm runoff increases, floods menace houses in lowlands, bare soil erodes, streams become polluted with sediment, walls of houses crack, foundations slip, and septic tanks fail. Normally these occurrences are not whims of Nature but the result of poor land use planning.

This reflects the need of providing soil surveys and other technical data to planners and developers as this growth takes place.

Education and Training

Full resource development and industrial expansion depend upon the availability of skilled workmen.

The area needs to create a well-trained labor force through a combined program of adult education, industrial arts education, and comprehensive trade school training.

A fully implemented Cooperative Area Manpower Planning System (CAMPS) will be most effective in making training available to people in rural areas where the need is the greatest.

Resource educational work with youth groups through schools and youth organizations should be increased.

Quality of the Environment

Much of the area's landscape is marred by junkyards, trash and litter, spoil areas, eroded highway ditches and banks, weed and brush infested land, eroded fields, abused woodlands, polluted streams, drab and unsightly communities, and other eyesores.

An effective means of coordinating activities contributing to the enhancement of natural beauty is needed.

Garbage Disposal

Garbage and refuse dumping along rural roads is evidence of the need for additional disposal areas. In addition, a continuous educational program is needed to create public awareness of the problem and sound, well-enforced laws are necessary.

Mineral Resources

The principal mineral industry activities are production of mineral fuels, petroleum, natural gas, and natural gas liquids. The most extensive deposits of mixed sand and gravel occur in Webster Parish and its value ranks next to the mineral fuels.

Huge iron ore reserves estimated at 2 billion tons have been mapped. If an iron and steel industry proves feasible, this reserve would supply a large mill for over 400 years.

Substantial lignite deposits are indicated by various known outcroppings in the Claiborne Parish area. Large quantities of this mineral will be needed in the commercial development of the iron ore reserves if the planned iron and steel industry is developed.

Legends and historical records report findings of lead and silver in substantial quantities in the Rocky Mount area in Bossier Parish and the Germantown area in Webster and Claiborne Parishes. Oil well cuttings of lead ore bodies also have been reported in Claiborne and Webster Parishes. These reports appear sufficiently impressive to warrant a geological inquiry for these minerals.

Water Control

Some communities suffer property damage from flooding. Technical and financial assistance is needed for planning and developing water control systems.

Highway Improvement

The project area cannot grow without good, improved roads. These roads should be developed on a priority basis with highest priority given to the major ones crossing the project and those that provide access to Interstate 20 and other principal U. S. Highways.

With one exception, only primary major roads were discussed by the committee.

Housing

Although the quality of housing has improved greatly in recent years, there is a need for adequate housing for families at the lower level of income.

Project Measures

Flood Control in Junction City Area (Claiborne)

This proposal calls for assistance in planning and implementing a flood control and drainage program. The Community has long been plagued with the unsightly, unsanitary conditions caused by this program.

RC&D technical and financial assistance is needed.

Flood Control in Haughton Area (Bossier)

RC&D technical and financial assistance is needed for planning and developing a water control system for Haughton.

Flood Control in Benton (Bossier)

This project measure calls for RC&D technical and financial assistance for planning and installing a water control system for the town of Benton.

Haynesville Airport Erosion Control (Claiborne)

Stabilize critical eroding and sediment-producing areas on the runway slopes. If left unchecked erosion could endanger the runway.

RC&D technical and financial assistance will be needed.

Homer Presbyterian Village Erosion Control (Claiborne)

Stabilize eroding and sediment-producing areas on the oxidation pond levees of the nursing home. This problem is causing excessive maintenance costs, is unsightly and could, in time, endanger the pond.

RC&D technical and financial assistance will be needed.

Minden Cemetery Erosion Control (Webster)

Provide RC&D technical assistance for erosion control measures on the Minden Cemetery.

The Minden Cemetery Association is the sponsor.

Plywood Plant Road Erosion Control (Bossier)

Provide RC&D technical and financial assistance for erosion control on the parish access road to the Anthony Forest Products Co. plywood plant near Plain Dealing.

Mineral Deposit Survey (Bienville)

This project measure involves a study of methods to improve the parish's raw mineral properties for commercial uses. Estimated cost of the study is \$110,000. The Louisiana State Science Foundation is funding \$57,000 and the remainder will be contributed by the Gulf South Research Institute, the Louisiana Geological Survey, and the LSU School of Geology.

Sponsors are the Arcadia Development Company and the Bienville Parish Police Jury.

Mineral Resource Survey (Claiborne)

A systematic investigation and mapping of lignite deposits are needed for the purpose of locating lignite supplies at or near the Claiborne Parish iron ore deposits.

A preliminary geological inquiry for lead, silver, and possibly other relatively rare or rare metal ores also is needed.

Brine Survey (Claiborne)

Make a survey of brine resources with the objective of establishing a bromide and related chemical industry in the parish.

Sponsor is the Claiborne Parish Police Jury. An appropriation of \$40,000 has been requested from the State to finance the survey.

Pilot Iron Ore Plant (Claiborne)

An application has been filed for a grant of \$880,983 from the Economic Development Administration to build and operate a pilot iron plant in Claiborne Parish. Geological surveys indicate vast iron ore deposits in the project area and if initial operations prove feasible, the pilot plant could be a forerunner to a much larger one. Once minimum scale commercial development gets underway, it is possible that over a period of several decades commercial development could progress to a moderate Birmingham scale level, and possibly to even higher levels.

It is proposed that all possible assistance be given to developing the natural resources needed to support the industry.

The Homer Development Company, Inc. is the sponsor.

Community Resource Planning

A number of communities in the project area are preparing or updating their comprehensive plans. Soil interpretations maps which are to be included in the plans have been requested by some of them. These maps show the suitability of land areas for industrial sites, streets, home-sites, recreation areas, disposal of sewerage, and other uses. Onsite assistance has also been requested in interpreting the data and in using it for broad community planning.

Soil Scientist technical assistance is needed from the Soil Conservation Service. Estimated soil scientist time and costs are included in the Agriculture section of the plan.

Requesting soil survey maps as project measures are: Springhill, Minden, Minden Industrial Park, Bossier City, Benton, Plain Dealing, and Homer.

Benton Master Plan (Bossier)

Explore all sources of assistance for developing a master plan for the town of Benton.

Community and Leadership Program (Webster)

Rural communities in Webster Parish are identified and surveys made to determine the resources of the communities. The citizens are informed of the situation, leadership is developed, assistance from government agencies are explained and the people are encouraged to fully develop their resources. The program is sponsored by the Louisiana Cooperative Extension Service.

Reappraisal of Unemployment (Claiborne)

A reappraisal of Claiborne Parish's unemployment statistics is needed for possible reclassification of the parish into a Redevelopment Area. As such, the parish would be eligible for considerable additional benefits through the various programs of the Economic Development Act.

Assistance is needed from the Louisiana Division of Employment Security.

Growth Center Designation (Webster)

Reevaluate the designation of Wards 3 and 4 in Webster Parish as a Growth Center of the Red River Economic Development District.

This designation was requested by the District Council in the Overall Economic Development Program, however, the Economic Development Administration failed to include the Wards as a Growth Center. As such the area would be eligible for additional assistance under the Public Works and Economic Development Act.

Health Planning Council

This project measure calls for the endorsement and support of an area-wide Health Planning Council. The purpose of the council is to assess the health needs of the area and to improve the situations after they are found. Problems such as air and water pollution, waste disposal, insect control, and immunization programs that affect the health of people will be studied and solutions recommended. The program is voluntary and advisory.

Sponsors are the police juries of the area which includes the 4th Congressional District plus Sabine Parish. Funding will be 50 per cent Federal and 50 per cent local.

Council on the Aging (Webster)

This project measure calls for the support of the Webster Parish Council on the Aging.

Commuter Towns (Bienville)

This project measure calls for a planned campaign to advertise and promote Bienville Parish as having commuter towns or "bedroom towns".

Because of the proximity to larger cities and towns, the friendly atmosphere, ample space, and access to Interstate 20, the communities will attempt to attract people to live in them and work elsewhere. The success of this program will largely depend upon the conveniences and facilities offered by the communities.

Plywood Plant (Webster-Bienville)

This project measure extends support for the construction of the Woodard-Walker-Williamette, Inc., plywood plant in the Minden-Taylor area.

Rockwin Corporation Plant (Bienville)

This project measure extends support for the construction of a \$600,000 plant near Arcadia for the production of mobile and modular homes. Sponsor is the Arcadia Industrial Development Company.

Cotton Warehouse (Bossier)

This new modern cotton warehouse will supplement the one already located in Plain Dealing and will provide a needed service for farmers in the project area. It is designed so that it could be converted to other industrial uses if necessary.

Industrial Warehouse (Bossier)

A warehouse is needed in Bossier City to supply the day to day needs of industries in the area.

Assistance is needed from the Red River Economic Development District.

Alert Program

Endorse and encourage communities within the project area to participate in the Louisiana Alert Program for Municipal Development. This program is sponsored by the Louisiana Municipal Association, Louisiana Department of Commerce and Industry, and the Louisiana State Chamber of Commerce.

The program is designed to attract industry to the participating towns by making them more desirable places to live and work. It is also intended to improve communities by self-evaluation. Participation in the ten-point program covers such areas as beautification, education, public fire protection, health and sanitation, housing and construction, long-range planning, municipal finance, police and traffic, and recreation and streets.

Minden Civic Center (Webster)

This new center will include a City Hall, a multipurpose activities building, and a new police headquarters.

The Civic Center project was first proposed by the Civic Improvement Committee of the Minden Chamber of Commerce. It is being financed with local sales tax receipts.

Springhill Civic Center (Webster)

The Center is designed to house city and municipal offices and a coliseum area which will seat 950 persons. Included in the coliseum area will be meeting rooms, dressing rooms, and kitchen facilities.

Construction of a New Courthouse in Bossier Parish (Bossier)

This much needed structure will replace an antiquated, deteriorating courthouse built in the 1890's.

The Bossier Parish Police Jury is the sponsor. Estimated cost is \$2,750,000 for the structure and furnishings. A 15-acre tract of land valued at \$45,000 was donated. A bond issue has been approved by the parish taxpayers.

Homer Hospital (Claiborne)

Secure technical assistance and consultation services for long range planning for expansion of the hospital. The Homer Hospital Board is the sponsor.

Arcadia Municipal Airport (Bienville)

The airport has been a much needed and sought after facility for the entire parish. A contract for the construction has been awarded for the sum of \$106,465.

Sponsors are the Bienville Parish Police Jury, town of Arcadia and the Arcadia Development Company, Inc. The Federal Aviation Administration and the Louisiana Department of Public Works are sharing the construction costs.

Homer Municipal Airport (Claiborne)

This facility will help to promote the economic development of the area by providing industry and the tourist and recreation business swift transportation.

Sponsors are the Homer Development Company, Claiborne Parish Police Jury, and the town of Homer.

The Federal Aviation Administration and the Louisiana Department of Public Works will share the cost on a dollar matching basis. Cost for the first phase is \$172,620.

Vocational-Technical School Expansion (Webster)

Support a \$360,000 expansion program for the Northwest Louisiana Vocational School in Minden.

Airline High School Pilot Program (Bossier)

This is a program under which students can get two years of Junior College level education at nominal cost. The 13th and 14th grades program is operated in conjunction with the high school and offers college credits.

If successful, the expansion of the program will be endorsed and encouraged.

Low Rent Housing

It is proposed that a study be made of low-rent public housing for the project area.

Housing Authorities have been formed or are being considered by a number of communities.

Low rent housing units have been constructed in Bossier City and Homer. Applications for units to be built in Minden, Haynesville, and Gibsland have been approved.

Garbage and Trash Disposal

The following project measures are designed to combat one of the most serious problems in the project area:

- - Develop additional areas for dumping trash and garbage to assist in eliminating illegal dumping of trash along the roads. Designate dump areas in each ward.
- - Place 55-gallon drums for trash disposal on all the highways in the project area. Paint them according to Highway standards and letter them with anti-litter slogans.
- - Have a litter bag manufactured with a map printed on the back showing the location of all disposal areas.
- - Erect signs on the parish roads warning that littering is subjected to a fine.
- - Proclaim a litter prevention week.
- - Contact a college or university to do a study on the graduate level on waste and trash disposal.
- - Contact the director of the State Highway Police and the Parish Sheriffs regarding enforcement of anti-litter laws.
- - Conduct a continuous public information program.

All organizations which have goals to clean up and improve the area will be encouraged and supported.

Sanitary Landfills

Sanitary landfills, approximately $\frac{1}{4}$ acre in size, are proposed for the smaller communities and one acre and larger for the larger communities.

Technical soils assistance is needed to locate suitable sites. Financial assistance is needed for land procurement and construction.

Industrial Water Disposal Study (Claiborne)

A study of the feasibility of discharging industrial waste into the Old Homer Oil Field is needed. This would be a new method of controlling the discharge of water which usually goes into the streams and lakes of the area. If practical, this would be an inducement for certain industries to locate here.

A EDA technical assistance grant is needed for the study.

Sewer and Water Facilities

A number of communities are developing much needed municipal water and sewer systems. These facilities will be of great economic benefit to the area.

Four water systems with Farmers Home Administration loans of approximately \$572,500 have been completed as Bossier-Webster RC&D Project measures and are now in use in the communities of Gilark, McIntyre, Village, and Jenkins. Also completed is the Carstarphen Heights water system which was sponsored by the town of Plain Dealing.

Systems in various stages of development include:

- - Central Water System

A \$43,000 FHA loan is financing the system. It will initially serve 45 families.

- - Union Grove Water System

A \$34,000 insured FHA loan has been approved.

- - Shongaloo Water System

Sponsored by the Shongaloo Water System, Inc., which was organized as a Lions Club project. A FHA loan of \$178,000 is needed for installation.

- - Beech Springs System

A feasibility survey is needed. If it is feasible an application for a FHA loan will be made.

- - Dixie Inn Water and Sewer System

A grant and loan is needed. Requests for assistance have been made to the Red River Economic Development District and the FHA.

- - Lisbon Water System

A \$74,000 FHA loan has been closed out.

- - Princeton-Fillmore Water System

A \$133,000 FHA loan is needed. The system, which is an extension of the Village Water System, would serve 136 families in the Red Chute area.

- - Benton Neighborhood Water System

Sponsored by the Benton Neighborhood Water Systems, Inc. and approved by the Caddo-Bossier Council of Local Governments. A \$17,500 FHA loan is needed.

- - Bossier City-Benton Water Line

This line will make water available to Benton and residents south of and including Bossier City. Source of water will be the Cypress-Black Bayou reservoir. Bonds totaling \$500,000 have been issued for the local share of the \$1,000,000 total cost. A grant for \$301,000 has been applied for through HUD. Sponsored by the Cypress-Black Bayou Recreation and Conservation District.

- - Springhill Water and Sewage Systems

Installation of the systems is underway. Total cost is \$560,000 with a 33 per cent cost-sharing grant from the Federal Water Pollution Control Administration. Local funds to be derived through the city sales tax. A HUD loan of \$9,300 was used for planning the system.

- - Bossier City-Barksdale AFB Sewage Treatment Plant

This project which involves a joint sewerage treatment system estimated to cost some \$2.5 million is under study. The system would be designed to avoid pollution of Red River.

- - Plain Dealing Water and Sewage Systems

The two systems are in need of repair. Total cost is estimated to be \$704,000.

- - Ringgold Water and Sewage Systems

These systems are in need of improvements as proposed in the "Comprehensive Area-wide Water and Sewer Plan for the Communities of Bienville Parish".

Loans and grants from the FHA or the Red River Economic Development District are needed.

- - Arcadia Water and Sewage Systems

These systems are in need of improvements. This project measure calls for the endorsement of the program and the need of a grant from the Economic Development Administration through the Red River Economic Development District and the Federal Water Pollution Control Administration.

- - Assistance for Implementing Water and Sewer Plan (Bienville)

Explore all sources of assistance for implementing recommendations contained in the "Comprehensive Area-wide Water and Sewer Plan for the Communities of Bienville Parish".

- - Comprehensive Water and Sewer Plan (Webster)

A parish-wide plan for water and sewer needs in Webster Parish is being made. The plan is financed with a FHA grant totaling \$10,240. Minden and Springhill to be excluded.

- - Comprehensive Water and Sewer Plan (Bossier)

A parish-wide plan is needed for the communities of Bossier Parish, excluding Bossier City. The Police Jury initiated action by reactivating the parish planning commission.

Grant funds are needed from the Department of Housing and Urban Development.

- - Comprehensive Water and Sewer Plan (Claiborne)

It is proposed that a comprehensive area-wide water and sewer plan for the communities of Claiborne Parish be made.

A FHA grant is needed to finance the plan.

Development of Industrial Parks

Every source of assistance will be explored for technical and financial assistance for developing industrial parks in the project area. This assistance would include soils maps, contour maps, and site preparation.

Homer Aerial Photographs (Claiborne)

Provide aerial photographs of the town of Homer and anticipated growth area for use in community planning. The photographs will be placed in the Mayor's and the Chamber of Commerce offices.

Lake Claiborne Aerial Photographs (Claiborne)

Aerial photographs of Lake Claiborne are needed for future planning. The latest flight of photographs available does not show the lake.

Highway Improvement

These project measures propose that a high priority be assigned to the following:

- - State Highway 9. Rebuild from Homer to Arcadia and Interstate 20.
- - State Alternate 2. Rebuild from Shongaloo through Haynesville to Summerfield.
- - State Highway 7. Widen and resurface from Ringgold to the Webster Parish line.
- - State Route 3105 (Airline Drive). Improve to a four-lane facility from U. S. 71 to Interstate 220.
- - U. S. 71. Resurface between Curtis and the Red River Parish line.
- - U. S. 80. Resurface sections between Bossier City and the Webster Parish line.
- - State Highway 3. Four-lane from Bossier City north to Interstate 220.
- - State Highway 72 (Old Minden Road). Four-lane from Benton I-20 ramp to the Minden Road I-20 ramp.
- - State Highway 531 (Dubberly Road). Extend from its intersection with U. S. 80 northward to U. S. 79.
- - Construct a road through the Louisiana Army Ammunition Plant which would connect Interstate 20 with the Sibley-Doyline highway at the east end of the plant reservation and just west of the Dorcheat Bayou.
- - Construct a two-lane bridge paralleling the present structure across Red River on the Shreveport-Barksdale Highway.
- - State Route 159 (Lewisville Road). Rebuild between Shongaloo and Minden and beautify the roadside following construction.
- - State Route 7. Improve from Bienville Parish line north to I-20.
- - Four lane the Sibley road from I-20 to Midland Street in Minden.
- - Accelerate plans for completing construction of I-20 in Bossier Parish.

- - Accelerate the letting of contracts for the construction of the I-220 bypass route in Bossier Parish.
- - State Route 7. Asphalt concrete overlay from Cotton Valley to Cullen.

Highway Safety Program (Webster)

Assist in every possible way the Webster Parish Police Jury's Highway Safety Program.

Soil and Water Conservation Workshop

Seek sponsors to provide financial assistance to one teacher in each parish to participate in the Soil and Water Conservation Workshop held each summer at Northwestern State College.

Soil Stewardship Week

Soil Stewardship Week is an annual observance proclaimed to remind all people of God's gifts of soil and water. It is a time also that we need to thank God for the bountiful richness that comes from these resources.

It is proposed that assistance be given the soil and water conservation districts in sponsoring this annual observance.

Outdoor Education Resident Program (Bossier)

The Bossier Parish School Board is requested to look into the possibility of incorporating an "Outdoor Education Resident Program" in the present school activities.

This program operates on the principle that the retention and interest of school children can be greatly increased by helping them to relate their classroom education to their natural surroundings. It centers around an outdoor education center at which school children would receive intensive instruction in outdoor education and the relation of nature to formal education.

The RC&D Education and Training Committee is the sponsor.

Outdoor Education and Natural Science Areas

Investigate the need for an interest shown for establishing a natural science study area in each parish to serve as outdoor laboratories in forestry, soils, water, wildlife, and some minerals.

Assistance with the establishment of study areas are given by technical representatives of the LSU Cooperative Extension Service, State Department of Wild Life and Fisheries, State Department of Education, Louisiana Forestry Commission, and the Soil Conservation Service.

These areas are established in response to local requests.

Conservation in Miniature Project (Webster)

Develop at Richardson School in Minden a miniature model farm, illustrating conservation practices and techniques. Realism will be stressed and emphasis placed on interrelating the most important natural resources: soil, plant life, and water.

The objective is to present to teachers and children an outdoor classroom of approximately 1200 square feet, depicting a working example of scientific conservation as it pertains to local conditions.

As a contrast, the effects of soil erosion, gullies, floods, siltation, and loss of water will be developed.

The child could then compare the values of conservation and understand why conservation is practiced and appreciate its need.

Technical assistance is needed from the Soil Conservation Service, Agricultural Stabilization and Conservation Service, Louisiana Cooperative Extension Service, Louisiana Forestry Commission, and the Louisiana Department of Agriculture.

Sponsor is the Webster Parish Technical Action Panel.

4-H Contest (Bossier and Webster)

Endorse and assist in the 4-H Conservation Demonstration Contest program.

Northwest Louisiana School for the Mentally Retarded (Bossier)

This institution will train mentally retarded children to be partially or completely independent. It will serve children from the northwestern parishes of the State and will be able to accept 750. The long waiting lists of applicants for existing institutions testify to the need of the school.

The facility will cost about \$7,500,000. Initial funds amounting to \$2,250,000 will come from the sale of bonds from the recently voted state bond issue. Federal matching funds will be needed. A 90-acre tract of land has been donated for the school site.

Drainage Program in Cotton Valley (Webster)

This project measure calls for planning and developing a drainage program in and near the town of Cotton Valley.

Assistance is needed from the Louisiana Department of Public Works.

Not included in this plan are a number of Bossier-Webster project measures that have been completed.

ESTIMATED COSTS AND EFFECTS OF PROJECT MEASURES

Costs

Estimated costs of installing the proposed project measures listed in this plan are shown in the table below.

Expenditure Item	Installation Period (1970-1985)	Annual Operation and Maintenance
Labor	\$ 32,807,000	\$ 824,000
Non-labor	\$ 83,315,000	\$ 582,000
Total	\$116,122,000	\$1,406,000

Economic Effect

Estimated effect of the proposed project measures when installed and fully developed on increases in local employment and gross income during and after the 15-year installation period is shown in the following table.

Impact Item	<u>During Installation</u>		<u>:After Installation 1/</u>	
	Man-yrs of:		Man-yrs of:	
	Employment:	Income	Employment:	Income
	Number:	Dollars	Number	Dollars
Project installation, operation and maintenance	:	:	:	:
Labor expenditures	3,300:	\$ 21,560,000:	114	:\$ 742,000
Non-labor expenditures	1,070:	\$ 36,539,000:	14	:\$ 495,000
Multiplier effects 2/	1,700:	\$ 58,099,000:	36	:\$ 1,237,000
Project associated activity 3/	930:	\$ 24,240,000:	1,620	:\$26,820,000
Total	7,000:	\$140,438,000:	1,784	:\$29,294,000

1/ Estimated change in annual employment and income levels within the RC&D area resulting from the RC&D project after installation is completed.

2/ Based on analysis of other studies in similar areas the population and employment structure in the RC&D area, and the size and location of trade centers within and near the area, a gross income multiplier of 2.0 was used to estimate the multiplier effect of project expenditures.

3/ A measure of economic activity directly resulting from completed projects.

SPONSORSHIP

The sponsors of the Trailblazer 4 Resource Conservation and Development Project jointly submit this plan.

WITNESS THE SIGNATURES OF THE UNDERSIGNED SPONSORING ORGANIZATIONS BELOW:

Bienville Parish Police Jury

By Brady McCoy
Brady McCoy, President

Date November 12, 1969

This action authorized at an official meeting of the Bienville Parish Police Jury on November 12, 1969.
(date)

At Arcadia, Louisiana

Attest B. A. Alfred
B. A. Alfred, Secretary

Bossier Parish Police Jury

By Boyd Montgomery
Boyd Montgomery, President

Date November 12, 1969

This action authorized at an official meeting of the Bossier Parish Police Jury on November 12, 1969.
(date)

At Benton, Louisiana

Attest Cecile K. Boggs
Cecile K. Boggs, Secretary

Claiborne Parish Police Jury

By J. C. English
J. C. English, President

Date November 5, 1969

This action authorized at an official meeting of the Claiborne Parish Police Jury on November 5, 1969.
(date)

At Homer, Louisiana

Attest H. I. Barber
H. I. Barber, Secretary

Webster Parish Police Jury

By L. G. Mims
L. G. Mims, President

Date November 4, 1969

This action authorized at an official meeting of the Webster Parish Police Jury on November 4, 1969.
(date)

At Minden, Louisiana

Attest Ruth L. Overton
Ruth L. Overton, Secretary

D'Arbonne Soil and Water
Conservation District

By *A. O. Christian*
A. O. Christian, Chairman

Date Nov-10, 1969

This action authorized at an official
meeting of the D'Arbonne Soil and Water
Conservation District on 11-18-1969
(date)

At Farmersville, La.

Attest *Fred McFarland*
Fred McFarland, Secretary

Dorcheat Soil and Water
Conservation District

By *R. D. Hinton*
R. D. Hinton, Chairman

Date November 6, 1969

This action authorized at an official
meeting of the Dorcheat Soil and Water
Conservation District on Nov. 6, 1969.

At Minden, Louisiana

Attest *A. G. Hearn*
A. G. Hearn, Secretary

Saline Soil and Water
Conservation District

By *R. D. Conly*
R. D. Conly, Chairman

Date Nov. 6, 1969

This action authorized at an official
meeting of the Saline Soil and Water
Conservation District on Nov. 6, 1969.
(date)

At Ringgold, Louisiana

Attest *R. P. Thomas*
R. P. Thomas, Secretary

ACKNOWLEDGEMENTS

The Project Sponsors gratefully acknowledge the assistance received from the following agencies and organizations that participated in the development of this project plan:

United States Department of Agriculture

- Soil Conservation Service
- Forest Service
- Economic Research Service
- Farmers Home Administration
- Agricultural Stabilization and Conservation Service
- Agricultural Research Service
- Rural Electrification Administration

United States Department of Interior

- Bureau of Sport Fisheries and Wildlife
- Bureau of Outdoor Recreation
- Geological Survey
- National Park Service

United States Department of Commerce

- Economic Development Administration

United States Army Corps of Engineers

Louisiana

- Cooperative Extension Service
- State Parks and Recreation Commission
- Wild Life and Fisheries Commission
- Forestry Commission
- Department of Public Health
- State Soil and Water Conservation Committee
- Department of Highways
- Department of Public Works
- Department of Agriculture
- Department of Commerce and Industry
- L.S.U. Agricultural Experiment Station
- Department of Education
- Department of Labor

Others

- La. Association of Soil and Water Conservation District Supervisors
- Council of Local Government (Caddo and Bossier Parishes)
- Cypress-Black Bayou Recreation and Water Conservation District
- Homer Development Company

In addition, there were members of the steering committees, members of the resource committees, committee advisors and many other individuals and groups who were of invaluable assistance in the preparation of this plan and who contributed in many other ways. Although the names of these persons are not listed, their contributions were considerable and are hereby being gratefully acknowledged.

